



# **TH 371 Access Management Plan**

## **April 2001**



**District 3**

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## **1.0 Introduction**

In the fall of 1999, the Minnesota Department of Transportation (Mn/DOT) District 3 began the process of developing the Trunk Highway (TH) 371 Access Management Plan. The purpose of the plan is to provide recommendations for access management improvements on TH 371 between Wolda Road in Baxter and CSAH 18 in Nisswa. The corridor is 12 miles long and includes the cities of Baxter and Nisswa, and Unorganized Territory in Crow Wing County. Figure 1 identifies the segment of TH 371 that was studied.

### **1.1 Description of the TH 371 Corridor**

TH 371 is an important state highway that is a major recreational route and is part of a link between the Twin Cities metropolitan area and northern Minnesota lakes region. TH 371 begins in Little Falls at the junction with U.S. TH 10 and ends in Cass Lake at the junction with U.S. TH 2. TH 371 is primarily a two-lane rural highway serving commuter and commercial as well as a high level of recreational traffic. The existing four-lane between Baxter and Nisswa is the segment under study. Future plans are to complete the four-lane between both Little Falls to Brainerd and Nisswa to Pine River.

The TH 371 corridor between Wolda Road and Nisswa is rapidly developing as a major commercial area. Areas of commercial strip development are located along the entire corridor. Proposed major developments along the corridor include Menards, Colonel's Brainerd International Raceway (CBIR) expansion and development of the old airport property in Nisswa. The types of developments along the corridor are mixed commercial that vary in size from small family businesses to expansive commercial developments.

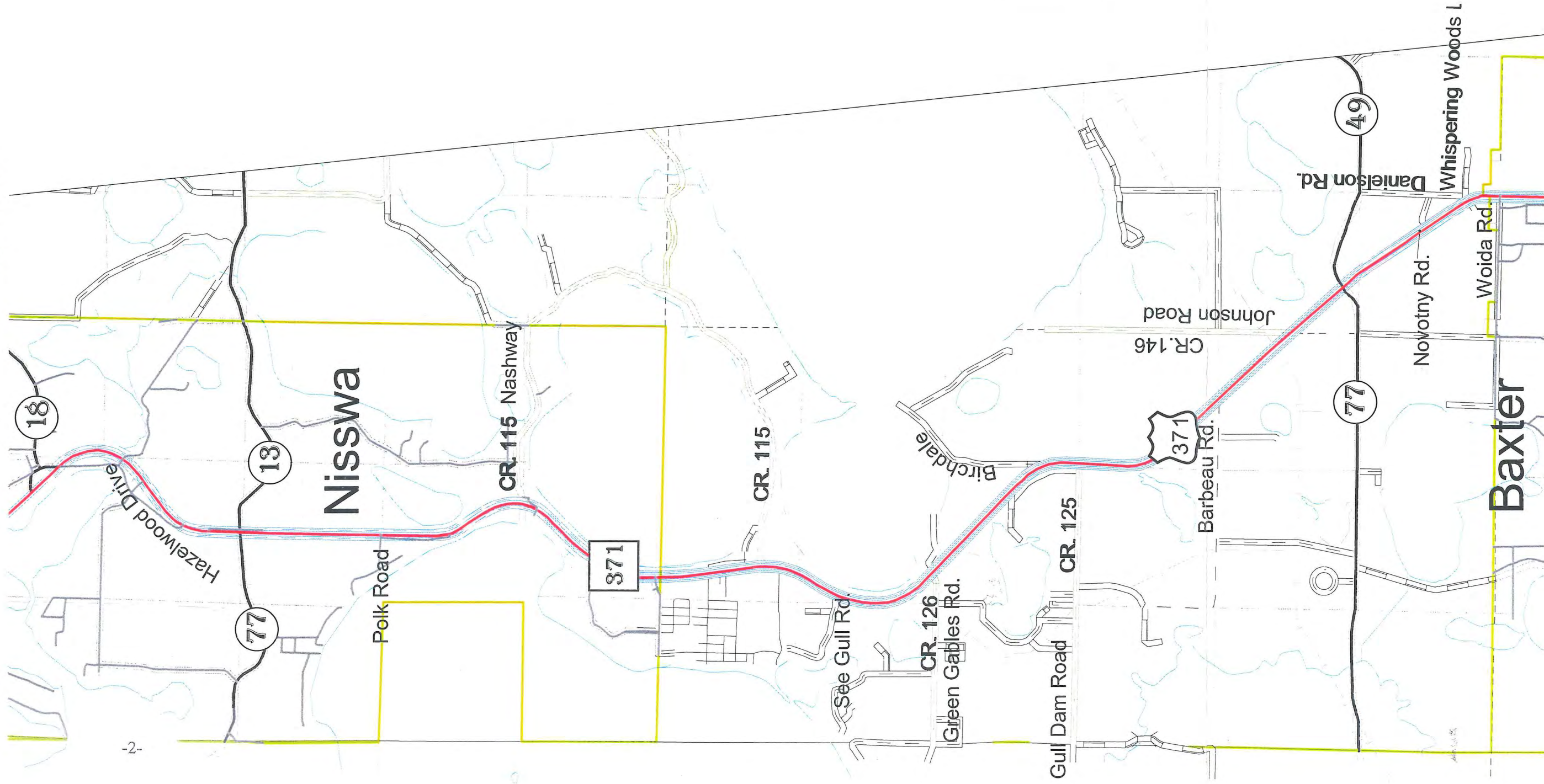
The need for this study is a result of safety, congestion, land access, and level of service issues within the corridor. Numerous driveways along the corridor pose a potential safety problem. As the corridor continues to develop, there is an opportunity to manage access through the coordination of transportation and land use decisions.

### **1.2 Access Management**

Access management is defined by the Federal Highway Administration as "the process that provides or manages access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. It attempts to balance the need to provide good mobility for through traffic with the requirements for reasonable access to adjacent land uses."

As communities grow, it becomes more important to manage access. The need for better access management is most obvious in areas of strip commercial development. Too many driveways can confuse drivers, who may be uncertain of their actions or those of other drivers. In addition, when there are no turn lanes, turning traffic impedes the flow of through traffic.

**Figure 1**  
**TH 371 Access Management Plan**  
**Study Area**



However, many property owners feel that access management limits their access and therefore affects their existing business or development potential of their property. On the contrary, some businesses and landowners may realize increased business or development potential as a result of improved access.

Access management research indicates that access management projects have important safety and operational benefits. Access management can provide benefits by:

- Reducing congestion, crashes, and crash potential

Past research has documented the reduction in crashes as a result of access management. Colorado and Florida have demonstrated through their studies that access management reduced crashes by up to 50 percent. Access management projects in Georgia and New Jersey, where medians were installed with protected left turn lanes, decreased crashes by 25 and 45 percent, respectively.

In Minnesota and Iowa, access management projects reduced crashes on average by 40 percent. Specifically, research completed using Minnesota data showed the positive relationship between access density and crash rates. Research showed that four-lane rural expressways (i.e., TH 371) had an increased crash rate when there were over five access points per mile.

- Preserving capacity and useful life of roads

Too many access points along a highway contribute to congestion and therefore prevent roadways from functioning as they were designed. The capacity of the roadway to move cars at the posted speed is reduced as cars slow down to turn. Good access management can preserve the capacity of a road and postpone the need for expansion projects. Traffic projections on TH 371 show ADTs steadily increasing and the implementation of access management plans can help accommodate the increased traffic volumes.

- Reducing travel time

Successful access management programs help travelers get to their destinations quickly and businesses move their goods efficiently. Studies in both Colorado and Florida found that travel delays were less on roads with good access management. Maintaining travel times on interregional corridors (IRC) such as Trunk Highway (TH) 371 is important because the IRC system ties Minnesota's largest economic centers together. The IRC network is discussed in Section 2.3.1.

- Improving access to properties

Good access management improves access to property and businesses. The quality of access to a site and protection of private property values are more than a function

of the number of driveways. Good access depends on the design and spacing of driveways, the ability to safely pull off and onto a highway, distance between intersections and traffic signal sequencing. Direct access may not necessarily be the best access depending on the function of the road.

Access management projects that involve a major reduction in access are many times very controversial. However, research has shown that access management projects can have a positive affect on businesses. Eighty percent of Iowa businesses along five corridors indicated that their sales increased, stayed the same, or that they were uncertain about the impact. In addition, 80 percent of businesses indicated they had no customer complaints about changes in access. Their research concluded that businesses with safe and easy access are more inviting to shoppers and visitors, and there are fewer traffic crashes at these locations.

- Coordinating land use and transportation decisions

New developments with poor access management increase the potential for future conflicts. This can be prevented by coordinating land use decisions and access management improvements. Transportation and land use approving authorities must coordinate their review of new developments.

The following are the six basic principles which are used to achieve the benefits of access.

- Limit the number of conflict points

Every access point along a roadway represents a potential conflict point between turning and through traffic. As the number of access points along a roadway increases, the opportunities for crashes and the potential for congestion increases. For example, an intersection of a four-lane roadway with a two-lane roadway has a total of 36 potential conflict points. Extending a median through the intersection can reduce the number of potential conflict points to four. As the number of conflict points is reduced, the potential for crashes also decreases.

- Separate conflict points

The potential for crashes can also be reduced by separating conflict points. Examples of this technique include establishing minimum intersection and driveway spacing standards and corner clearance standards. Each of these techniques provides the motorist with a less obstructed sight distance. Adequate intersection spacing allows motorists sufficient reaction time by reducing conflicting traffic.

- Separate turning volumes from through movements

Vehicles entering or exiting a roadway are generally moving at a slower speed than through traffic. Turning traffic can be removed through the use of turning lanes and

restricting turning movements through the use of center medians. Therefore, speeds are maintained, roadway capacity is preserved, and accident potential is reduced.

- Provide adequate spacing for intersections

Sufficient spacing between full intersections reduces the number of conflict points along a roadway as well as maintains speeds.

- Locate traffic signals to facilitate movement

When an arterial roadway has poorly spaced or too many signals, roadway capacity as well as mobility are reduced. Adequate signal spacing allows through traffic, as well as cross traffic, to travel with a minimum amount of delay.

- Provide on-site circulation and storage

The design of good circulation within a development reduces the number of driveways needed onto public roadways.

### **1.3 The Relationship between Land Use and Transportation**

Understanding the relationship between land use and transportation is important in developing a successful access management program. The development of land impacts the transportation system, while this system determines, to some extent, development patterns. Land use and transportation decisions need to be coordinated because of the link between land development and transportation. Communities are becoming more aware of the affects of development on the cost of services, as well as the community's image. Even so, conventional regulatory practices continue to perpetuate problems related to development. Strip commercial zoning along major corridors is an example of where regulations allow undesirable land use. The major reasons strip commercial zones are created include accessibility and the ease of re-zoning highway frontage as land is needed for new developments.

As growth along a corridor increases, conflicts arise between local access and the function of an arterial to move people and goods efficiently through an area. Commercial strip developments are different than typical downtown business districts because in many cases they are not designed for pedestrians or transit. The design of these commercial corridors frequently includes such barriers as walls, ditches, loading docks, and the arterial itself that makes pedestrian use very difficult.

Poorly designed development with inadequate access leads to an increased number of traffic conflicts as well as congestion. As a result, the level of service on the corridor will decline. Businesses may be affected by the decline in level of service and poor access. Ultimately the corridor may become very unattractive and not function very well.

Coordinated land use and transportation planning can help prevent development problems in the future. There are a variety of tools such as the comprehensive plan, zoning, and subdivision regulations that can support access management along a corridor like TH 371.

#### **1.4 Report Methodology**

The TH 371 Access Management Plan was developed with the assistance of Crow Wing County, the Cities of Baxter and Nisswa, and the Brainerd Lakes Area Chamber of Commerce. The TH 371 Access Management Committee was created with representatives from the local units of government along the corridor, as well as the Chamber. The TH 371 Access Management Committee met on a regular basis in order to provide guidance in development of the plan. In addition, meetings with property owners along the corridor were held in order to provide information to residents and businesses as well as obtain input. The key to a successful access management plan is developing a working partnership between Mn/DOT, counties, cities, townships, developers, and property owners. This cooperative strategy was used to develop recommendations for the TH 371 corridor between Baxter and Nisswa. As the plan is implemented, the "partners" will need to continue to work together.

Background information such as traffic data, land use, wetlands, and transportation plans was gathered as part of the planning process. This data was helpful in providing an explanation for some of the problems along the corridor. The background information also provided a basis for the access management recommendations.

Access management concepts were developed for each of the four segments:

- 1) Woida Road to CSAH 77/49,
- 2) CSAH 77/49 to CR 125,
- 3) CR 125 to St. Columbo Road, and
- 4) St. Columbo Road to CSAH 18 in Nisswa.

Property owners were provided with an opportunity to provide comments on the concepts at a number of meetings along the corridor. Based on input from both property owners and the local units of government, an access management plan was developed for the corridor.

The access management plan that was developed makes use of various access management tools. The access management concepts include service roads, consolidation of access points, elimination of median crossovers, and intersection improvements.

Finally, an implementation plan was developed for each segment that identified the general time frame for improvements and the implementing entity. Recommendations were also made regarding changes in local land use regulations that would be an important part of the successful implementation of the TH 371 Access Management Plan.

## 2.0 Background

The 12-mile segment of TH 371 that was studied serves a variety of traffic types, including commercial, recreational, and commuter. Some trips on the corridor are local while other trips are through trips that originate in the Twin Cities and end at locations north of the study area. Demographic, economic, traffic and land use data, as well as future transportation improvements were reviewed in order to provide a basis for access management recommendations in this plan.

## 2.1 Demographics

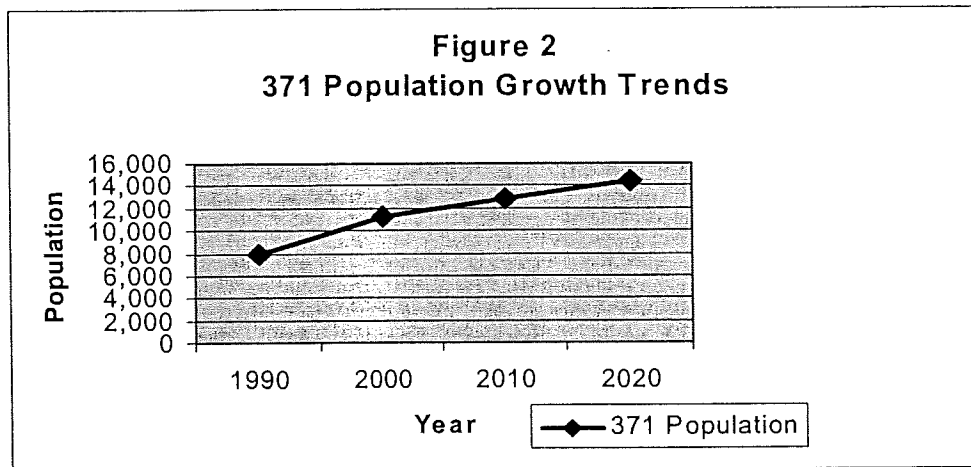
Population data was reviewed in order to show the growth trends within the corridor. Table 1 shows both historical census data and population projections for the study area of Baxter, Unorganized Territory, and Nisswa. In addition, total population for Cass and Crow Wing County communities along TH 371 is shown. It is estimated that substantial growth occurred between 1990 and 2000, with Baxter's population increasing by an estimated 50 percent. The population of Unorganized Territory grew by an estimated 29 percent, followed by Nisswa with a 21 percent increase in its population. The communities within the study area had an estimated gain of 3,302 people, while the entire corridor gained an estimated 6,439 people. Population projections were completed in 2000 by Maxfield Research as part of the development of the Cass/Crow Wing Community Based Plan. Maxfield Research projections show a trend of continued growth within Baxter, Unorganized Territory, and Nisswa as well as along the entire TH 371 corridor in Cass and Crow Wing Counties (see Figure 2).

**Table 1**  
**Historical Population and Growth Projections**

Minor Civil Division	Census		Mn. Plan	Maxfield Research			Percent Change			
	1980	1990	1998	2000	2010	2020	80-90	90-00	00-10	10-20
Baxter	2,625	3,695	5,189	5,563	7,031	8,500	41	51	26	21
West Crow Wing (Unorg. Territory)	3,655	3,987	4,904	5,133	5,872	6,612	9	29	14	13
Nisswa	1,407	1,391	1,621	1,679	1,814	1,950	-1	21	8	8
Subtotal	7,687	9,073	11,714	12,375	14,717	17,062	18	36	19	16
<b>Total *</b>	<b>31,291</b>	<b>34,377</b>	<b>39,528</b>	<b>40,816</b>	<b>45,578</b>	<b>50,341</b>	<b>10</b>	<b>19</b>	<b>12</b>	<b>11</b>

Source: Cass/Crow Wing Community-Based Plan, Draft

\* Total includes Cass and Crow Wing Minor Civil Divisions (MCDs) along TH 371



## 2.2 Economics

Economic trends also have an effect on the corridor. Brainerd/Baxter is a regional center and therefore has a large employment base. It is also a regional center that serves the shopping and medical needs of the area. Many of the trips to Brainerd take place on TH 371. Table 2 shows existing employment and growth projections for Region 5, Cass and Crow Wing Counties, and the TH 371 corridor. Maxfield Research completed the projections as part of the development of the Cass/Crow Wing Community Based Plan. There was an estimated increase of 3,200 jobs within the TH 371 corridor between 1990 and 2000, while Cass and Crow Wing Counties gained 8,900 jobs. Employment growth along the TH 371 corridor is projected to increase within the next 20 years (see Figure 3). The majority of the job growth will probably be in the Brainerd/Baxter area, which will impact the TH 371 corridor.

Tourism plays a major role in the region's economy and on traffic volumes. The Brainerd Lakes Area is part of the major norther-central Minnesota recreational area. Tourism within the lakes area is year around, resulting in increased winter and summer travel as more and more tourists visit the area to take advantage of the many recreational opportunities.

People travel north in the summer for golfing, fishing, swimming, and boating activities. Winter brings people north for snowmobiling, skiing, and ice fishing opportunities. Lakes within the study area include North Long Lake, Gull Lake, and Round Lake.

A major attraction within the corridor includes the CBIR. It is estimated that over 600,000 people attend the events at CBIR on an annual basis. Condominiums and a motel are being added to the site with a potential for an increase in the number of visitors to CBIR.

The Paul Bunyan Trail is also located within the TH 371 corridor. It is a popular multi-purpose trail used for biking, walking, skating, skiing, and snowmobiling.

Finally, there are numerous tourist related businesses such as amusement parks, gift shops, convenience stores, restaurants, bait stores, etc. along TH 371.

**Table 2**  
**Historical Employment and Growth Projections <sup>(1)</sup>**  
**Region 5, Cass & Crow Wing Counties, and TH 371 Corridor**  
**1990 to 2020**

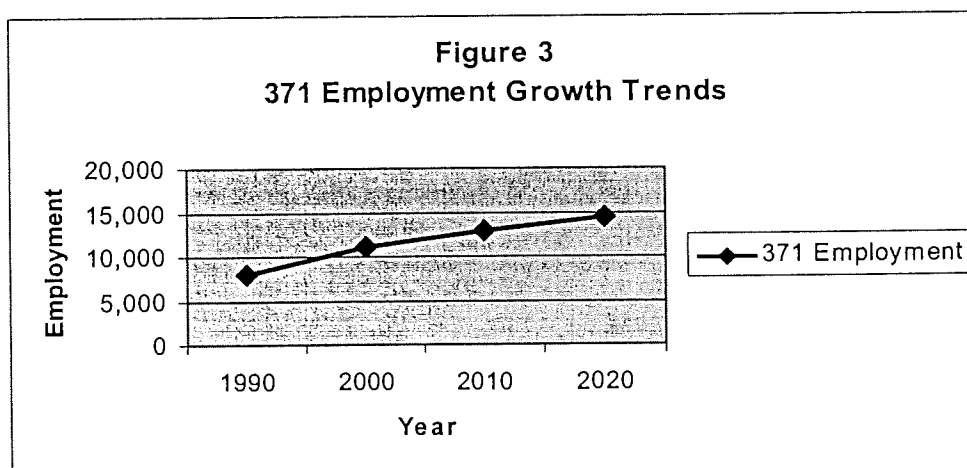
Area	1990	1996	1999	2000	2010	2020
Region 5 <sup>(2)</sup>	207,000	229,400	239,000	242,400	275,100	306,000
Cass & Crow Wing Co.	22,300	28,000	30,800	31,200	35,800	40,000
TH 371 Corridor	8,000	10,045	11,049	11,200	12,850	14,350

<sup>(1)</sup> Employment projections are preliminary as of January 2001

<sup>(2)</sup> Region 5 includes the counties of Cass, Crow Wing, Morrison, Todd, and Wadena

Area	CHANGE					
	1990-2000		2000-2010		2010-2020	
	Number	Percent	Number	Percent	Number	Percent
Region 5	35,400	17	32,700	14	30,900	11
Cass & Crow Wing Co.	8,900	40	4,600	15	4,200	12
TH 371 Corridor	3,200	40	1,650	15	1,500	12

Source: Cass/Crow Wing Community-Based Plan, Draft



## 2.3 Traffic Conditions

As cited earlier in this report, TH 371 serves as part of a major connection between the Twin Cities metropolitan area and the northern Minnesota lakes region. Existing and future traffic conditions need to be examined in order to make recommendations for future access management improvements.

### 2.3.1 Access Points

TH 371 is a principle arterial roadway that has been classified as a medium priority interregional corridor (IRC). The IRC system is a network of 2,930 miles of major highways that connect Minnesota's economic centers together (see Figure 4). As a medium priority IRC, the mobility function of TH 371 is very important and land access should be provided through a supporting system of service roads.

Table 3 shows a summary of access points for four segments of TH 371 between Wolda Road in Baxter and CSAH 18 in Nisswa. The types of access include residential, commercial, and public roads. The majority of the access points are private. The goal for TH 371 in the future is to eliminate direct private access onto TH 371 and establish full access at major public roads.

**Table 3**  
**TH 371 Corridor**  
**Existing Access Points**

Segment	Description	Northbound	Southbound
1	Wolda Road to CSAH 77/49 (Pine Beach Rd.)	6	6
2	CSAH 77/49 to CR 125 (Gull Dam Road)	16	17
3	CR 125 to St. Columbo Road	17	25
4	St. Columbo Road to CSAH 18	23	27

According to a Mn/DOT study titled "Statistical Relationship Between Vehicular Crashes and Highway Access," there is a positive relationship between the number of access points on a highway and the crash rate. In other words, as access density increases, there is an increase in the crash rate. Figure 5 shows this relationship for a four-lane rural expressway, i.e. TH 371. There is a 0.62 crash rate for segments with zero to five access points and 0.80 for segments with greater than five access points. The segment of TH 371 between Wolda Road and CSAH 18 has a density greater than five per mile; therefore, one would expect higher crash rates.



**Figure 4**  
**Regional Trade Centers and the**  
**Interregional Corridor System**

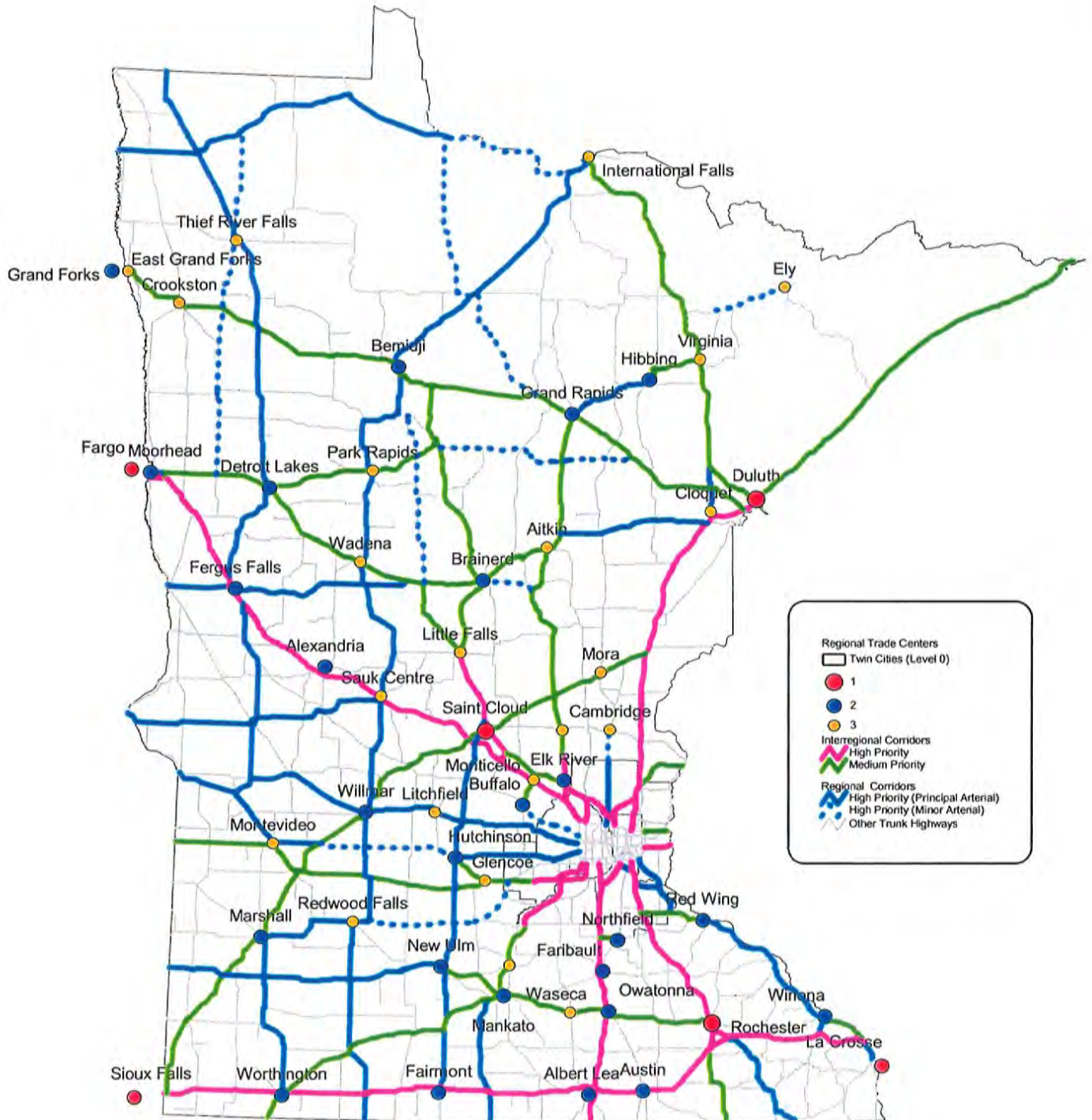
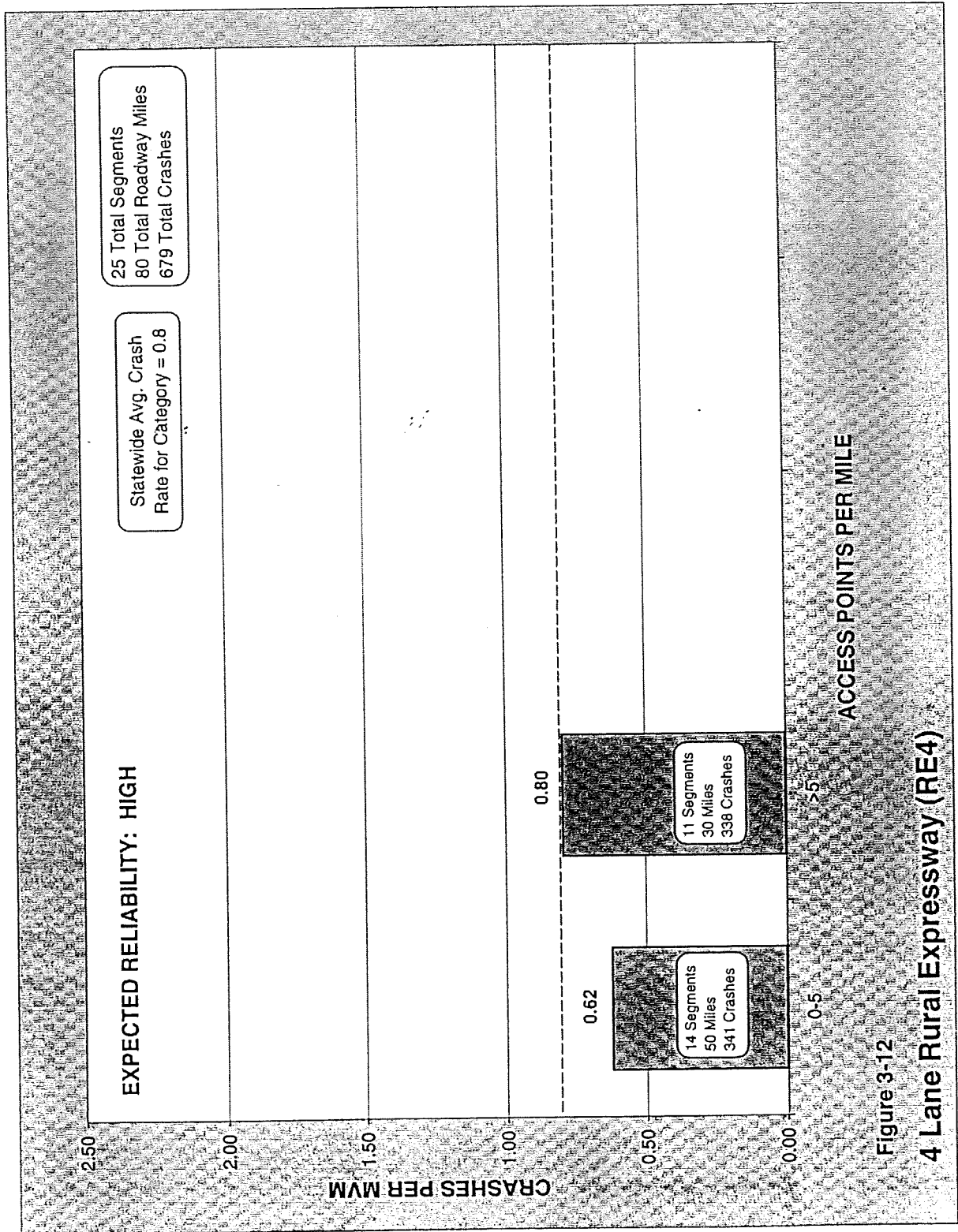


Figure 5



## 2.32 Crash Analysis

A crash analysis was completed to determine if there are significant safety issues which should be considered when making recommendations on access management improvements. Crash rates for 1997 to 1999 are shown in Table 4. The evaluation consisted of comparing existing crash rates with state-wide and district-wide rates for rural expressways. The crash rates ranged from 0.7 to 1.6 for TH 371 between Woida Road and CSAH 18. Overall the rates were higher than the state-wide rate of 0.9 and district-wide rate of 0.8. The severity rate ranged from 1.6 to 3.4 for the four TH 371 segments. The segment between CR 115 and CSAH 77/13 had a fatality rate of 1.5, while the other segments had no fatalities. In addition, the crash rate data supports the theory that greater access densities lead to increases in crash rates. As mentioned in the previous section, rural expressway segments with over five access points per mile have an average crash rate of 0.8 and TH 371 exceeds this rate.

**Table 4**  
**1997-1999 Crash Rates**

Segment	Crash Rate <sup>(1)</sup>	Severity Rate	Fatality Rate
Woida Road to CSAH 77/49	1.6	3.1	0.0
CSAH 77 to CR 125	1.1	2.2	0.0
CR 125 to CR 115	1.0	2.4	0.0
CR 115 to CSAH 77/13	0.7	1.6	1.5
CSAH 77/13 to CSAH 18	1.5	3.4	0.0

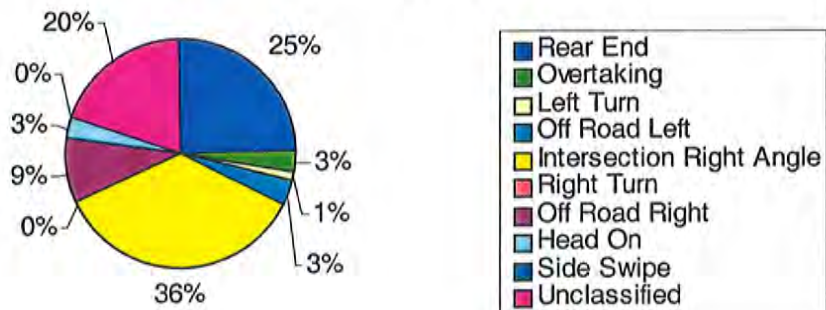
<sup>(1)</sup> State-wide rate: 0.9      District-wide: 0.8

A breakdown of crashes by type is shown in Table 5. The majority of crashes were intersection right angle crashes followed by rear end crashes. Figure 6 shows that 61 percent of the crashes on the corridor were intersection right angle or rear end crashes. Typically, right angle and rear end crashes are best reduced by limiting and better defining the access points to adjacent land uses.

**Table 5**  
**1997-1999 Crashes by Type**

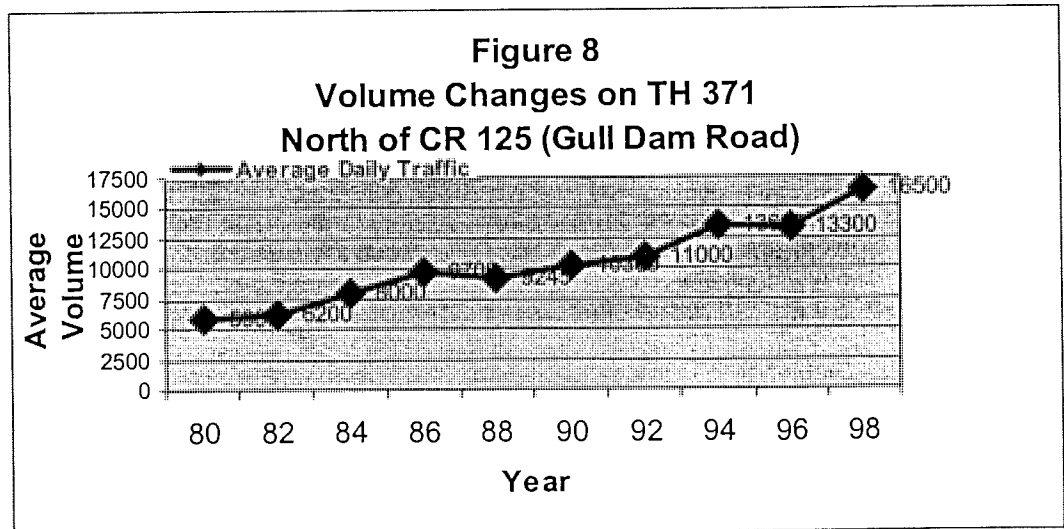
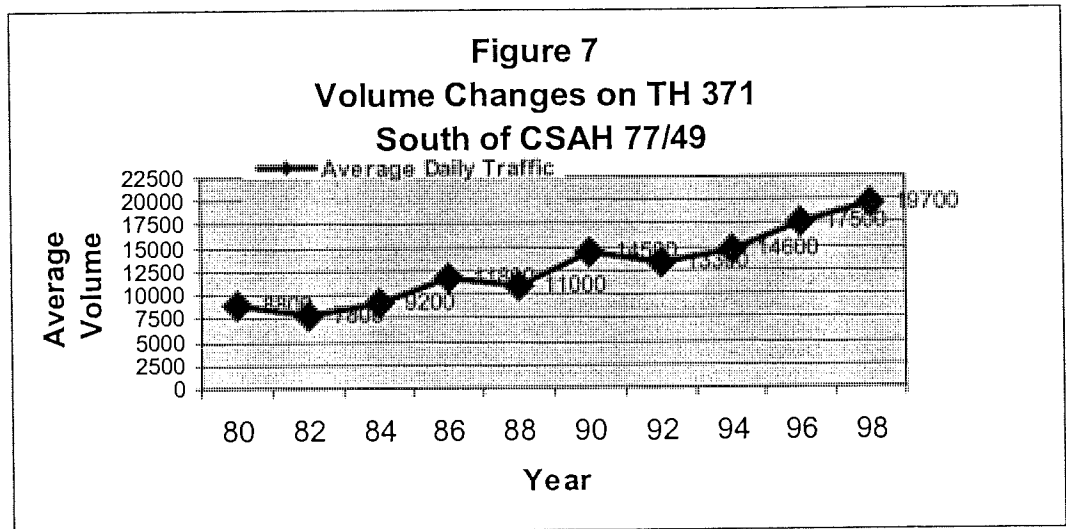
Type	Woida Rd. to CSAH 77/49	CSAH 77/49 to CR 125	CR 125 to CR 115	CR 115 to CSAH 77/13	CSAH 77/13 to CSAH 18	Total
Rear End	17	19	13	4	7	60
Overtaking	0	1	1	5	0	7
Left Turn	1	0	0	0	2	3
Off Road Left	0	3	0	5	0	8
Intersection Right Angle	15	15	26	15	13	84
Right Turn	0	0	0	0	0	0
Off Road Right	3	3	4	10	2	22
Head On	1	1	0	3	2	7
Side Swipe	0	0	0	0	0	0
Unclassified	13	10	4	15	6	48
<b>Total</b>	<b>50</b>	<b>52</b>	<b>48</b>	<b>57</b>	<b>32</b>	<b>239</b>

**Figure 6**  
**371 Crashes By Type**



### 2.3.3 Traffic Analysis

Traffic projections for the Year 2020 were completed using historical traffic volume data for 1980 to 1998 in order to complete a regression analysis. Figure 7 shows volume changes on TH 371 south of CSAH 77/49 for 1980-1998. Figure 8 shows volume changes on TH 371 north of CR 125.



Average annual daily traffic (AADT) volumes on TH 371 have continued to increase at a rate of 3.0 to 3.4 percent. Traffic volumes are projected to increase to 31,700 south of CSAH 77/49 and to 27,580 north of CR 125 (Table 6). Volumes are slightly higher on the southern end of TH 371 near Baxter, but growth rates are somewhat higher on the northern end near Nisswa.

**Table 6**  
**2020 Traffic Projections**

Location	Year 2020	Annual Growth Rate
South of CSAH 77/49	31,700	3.0%
North of CR 125	27,580	3.4%

Traffic data from automatic traffic recorders (ATR) along trunk highways that could be considered recreational routes were reviewed to determine the variation in traffic volumes that could be expected during the summer recreational season. (An ATR is a device which continually records traffic flow throughout the year.) Four ATRs were identified: TH 10 north of Rice; TH 169 south of Onamia, TH 65 north of Aitkin CSAH 2; and TH 371 south of the south junction with TH 200. Traffic volumes at these ATRs are recorded continually so that average daily traffic (ADT) can be determined for the year and also each month. Table 7 lists the average annual daily traffic (AADT) and the highest monthly ADT recorded as a percentage of the AADT. The highest monthly volumes at these locations occur in July and August and vary from 131.98 to 159.58 percent of the ADT.

**Table 7**  
**1998 ATR Data for**  
**Recreational Routes**

ATR	TH	Location	Annual ADT	Highest Month Percentage	Month of Occurrence
187	10	North of Rice	17,049	131.98	July
204	169	South of Onamia	9,417	142.94	July
222	65	North of Aitkin CSAH 2	1,664	149.76	July
223	371	South of S. Jct. TH 200	4,067	159.58	August

In selecting a peak month factor for TH 371, the ATR on TH 371 south of TH 200 was first considered. The ATR on TH 371 had a high monthly ADT of 159.58

percent. However, because of the relatively low AADT of 4,067 vehicles, the percentage may be high for the segment of TH 371 within the study area, which had 1998 AADT volumes of 16,500 to 19,700. Therefore, other ATRs were reviewed that have traffic volumes similar to those in the study area. For the analysis of TH 371, a summer month ADT of 140 percent of the AADT was selected. This value falls within the range of the ATRs on TH 10 and TH 169. Although the traffic volume is similar to TH 10, a greater recreational peak factor could be expected on TH 371 due to the surrounding recreational and seasonal land use.

Table 8 shows a comparison of daily and seasonal traffic volumes. Currently, the average summer month daily traffic is estimated at 27,580, which is 140 percent of the 1998 ADT of 19,700. When the projected AADT number of 31,700 is increased by 40 percent, the ADT for a summer month would increase to 44,380. This shows that there are significant impacts on TH 371 traffic volumes due to the level of recreational traffic in the summer months.

ADT volumes such as those projected for TH 371 can be carried on a four-lane expressway. Seasonal traffic volumes may exceed the capacity of TH 371. The magnitude of the volumes would suggest that access to the expressway be managed to preserve the ability of the expressway to carry the projected volumes safely.

**Table 8**  
**TH 371 Daily and Seasonal Traffic Volumes**

Year	Woida Road to CSAH 77 (Pine Beach Rd.)	North of CR 125 (Gull Dam Rd.)
1998	19,700	16,500
1998 (Seasonal)*	27,580	23,100
2020	31,700	27,420
2020 (Seasonal)*	44,380	38,390

\* Based on summer month ADT

## 2.4 Land Use

As discussed in Section 1.3, there is a relationship between land use and transportation. There will be positive benefits when land use and transportation planning are coordinated. As part of this study, both existing and projected land use along TH 371 were reviewed.

#### **2.4.1 Existing Land Use**

Existing land use along the corridor consists of areas of strip commercial development. Commercial development exists primarily between Woida Road to North Long Lake and in the Sportland Corners area. Residential land use exists within lakes area of North Long Lake, Round Lake, and Gull Lake. In addition, there is residential development along Hazelwood Drive in Nisswa. Figure 9 shows 1990 land use.

#### **2.4.2 Future Land Use**

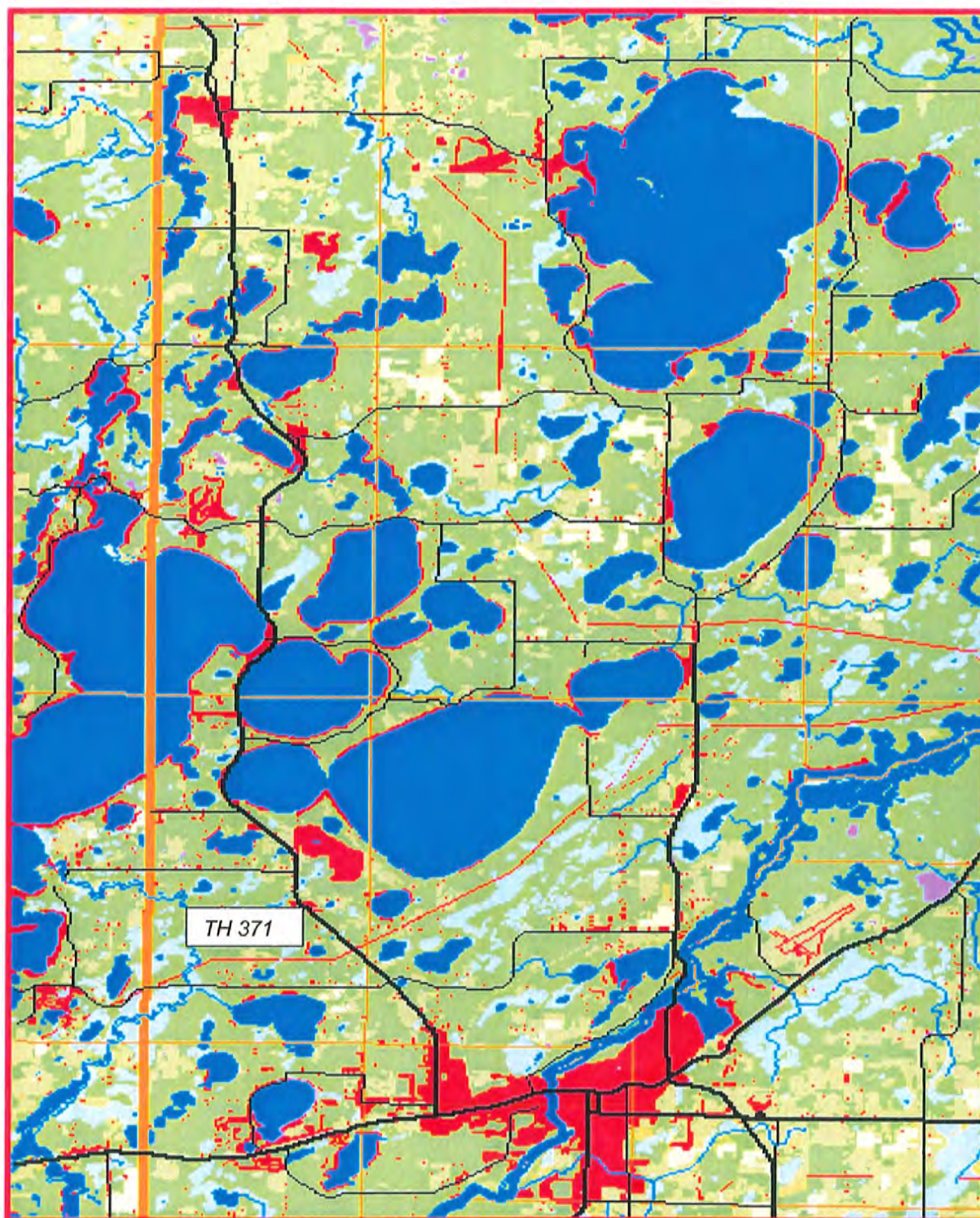
According to future land use plans, the TH 371 corridor between Baxter and Nisswa will remain primarily commercial. The lakes area of North Long Lake, Round Lake, and Gull Lake will remain primarily residential. Figure 10 shows future land use for Unorganized Territory. Future land uses that are shown are general commercial and office and service.

Cass and Crow Wing Counties are currently in the process of preparing the TH 371 Comprehensive Corridor Plan. The purpose of this plan is to guide and manage growth within the TH 371 corridor. Specifically, it provides recommendations for access management on TH 371 in Cass and Crow Wing Counties. The Corridor Plan also makes recommendations on transportation policies and strategies that local units of government can adopt in order to manage access along the TH 371 corridor.

Since the land use along the corridor is expected to experience additional commercial growth in the future, it is important to manage access to TH 371. Ultimately, the type and nature of the development along the highway will impact the highway.



Figure 9  
TH 371 Land Use, 1990



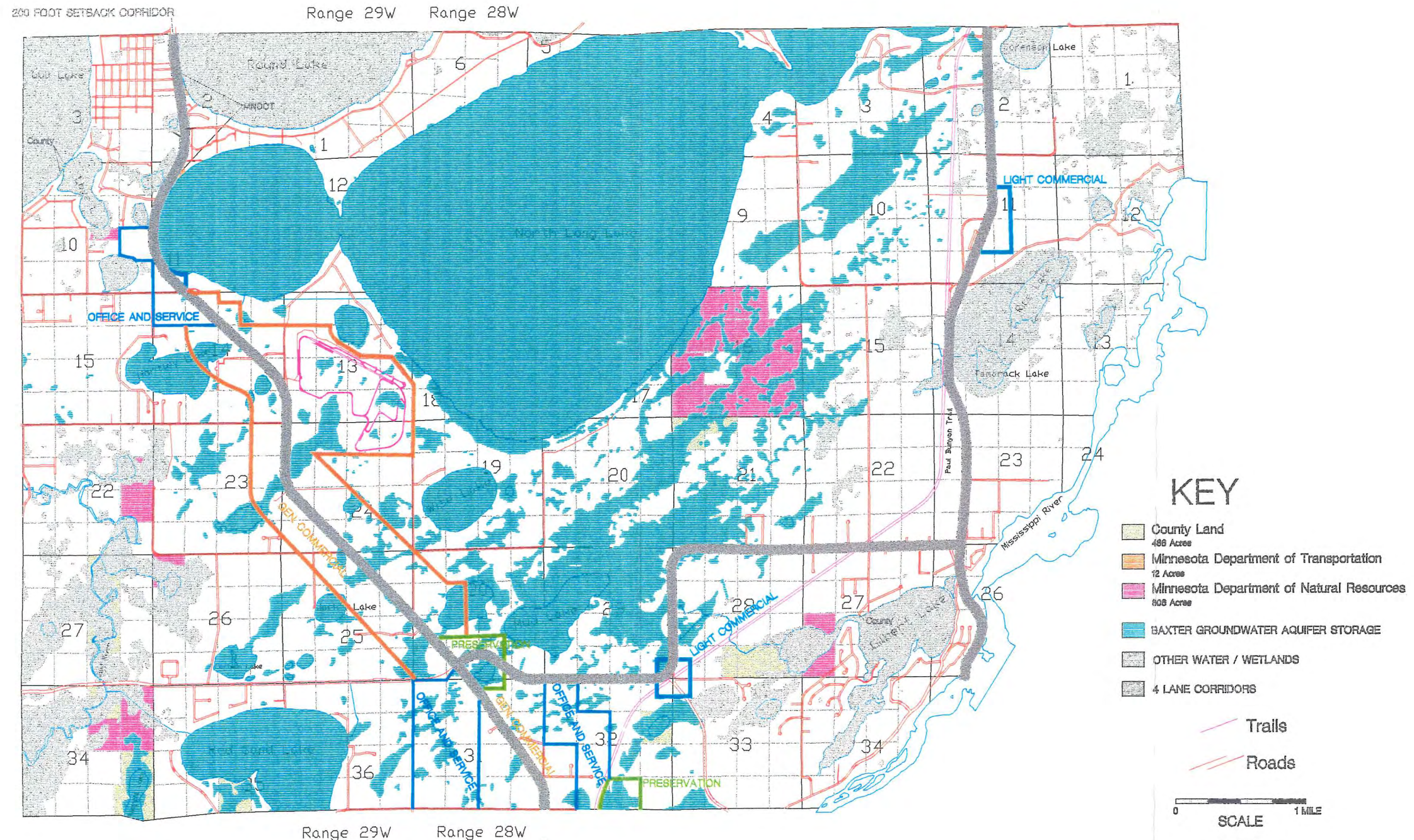
MINNESOTA LAND USE AND COVER  
1990s CENSUS OF THE LAND

- Urban-Rural Dev.
- Cultivated Land
- Hay/Pasture/Grassland
- Brushland
- Forested
- Water
- Bog/Marsh/Fen
- Mining



Figure 10

# Crow Wing County Unorganized Territory Land Use Map



## Information Sources

Ownership information supplied by County Land Department.

Public Land Survey, right of way, and trails supplied by Crow Wing County Surveyor.

Shoreline and wetlands from National Wetland Inventory (USFWS) courtesy Minnesota Department of Natural Resources.

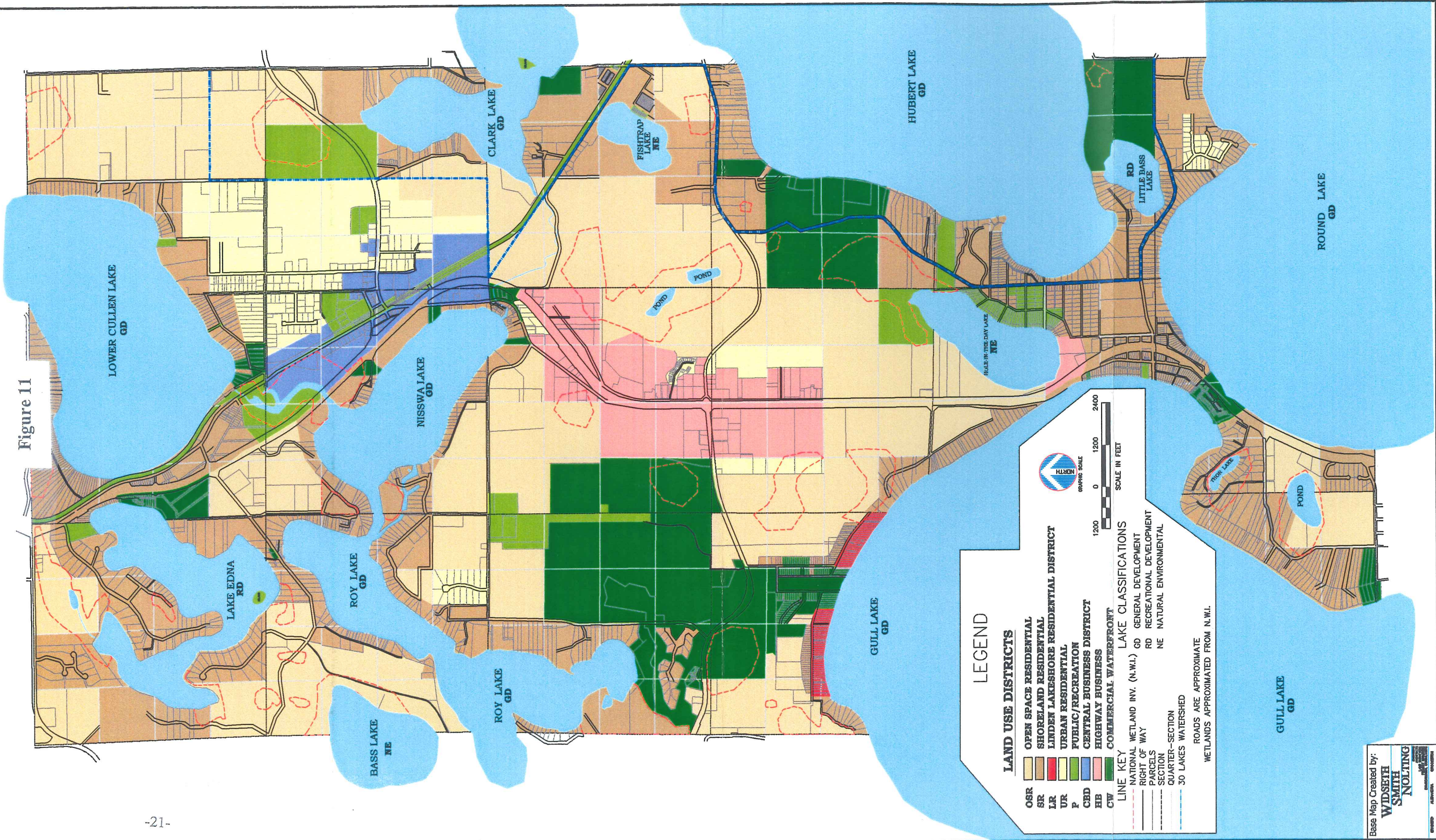
Township 134N, Range 28W, 29W

**WIDSETH  
SMITH  
NOLTING**

ENGINEERS  
ARCHITECTS  
LAND SURVEYORS  
PROJECT MANAGERS  
ENVIRONMENTAL CONSULTANTS

# CITY OF NISSWA ZONING MAP

Figure 11



## 2.5 Transportation Plans

The development of the TH 371 Access Management Plan requires coordination of local and state transportation plans. Functional classification is also important in identifying major access points.

### 2.5.1 Functional Classification

Functional classification refers to the manner in which highways are grouped into classes according to the character of service they are intended to provide. The two characteristics that determine a highway's functional classification are access and mobility. At one end of the scale are highways designed for high speed, long distance travel. To achieve this objective, very little access to the adjacent land is provided. At the other end of the scale are roads designed to provide a greater degree of access to adjacent land uses. This classification recognizes that most travel involves movement through a network of roads. The roads that make up the highway network are categorized based on their functional relationships and hierarchy of movement. Figure 12 shows functional classification in the study area.

TH 371 is classified as a principle arterial highway. As such, the ability of a highway to provide a high level of service to long distance travel is to be favored over its ability to provide immediate land access. The role of TH 371 in carrying long distance travel is most evident in its role of carrying recreational traffic from the Twin Cities area to the Brainerd lakes area. TH 371 also serves to carry traffic from the local transportation system throughout Crow Wing County to major destination points such as Brainerd and Baxter. No other facility in western Crow Wing County or southern Cass County is capable of providing this important link.

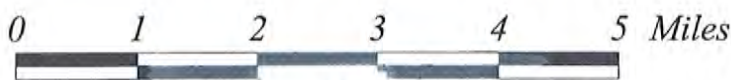
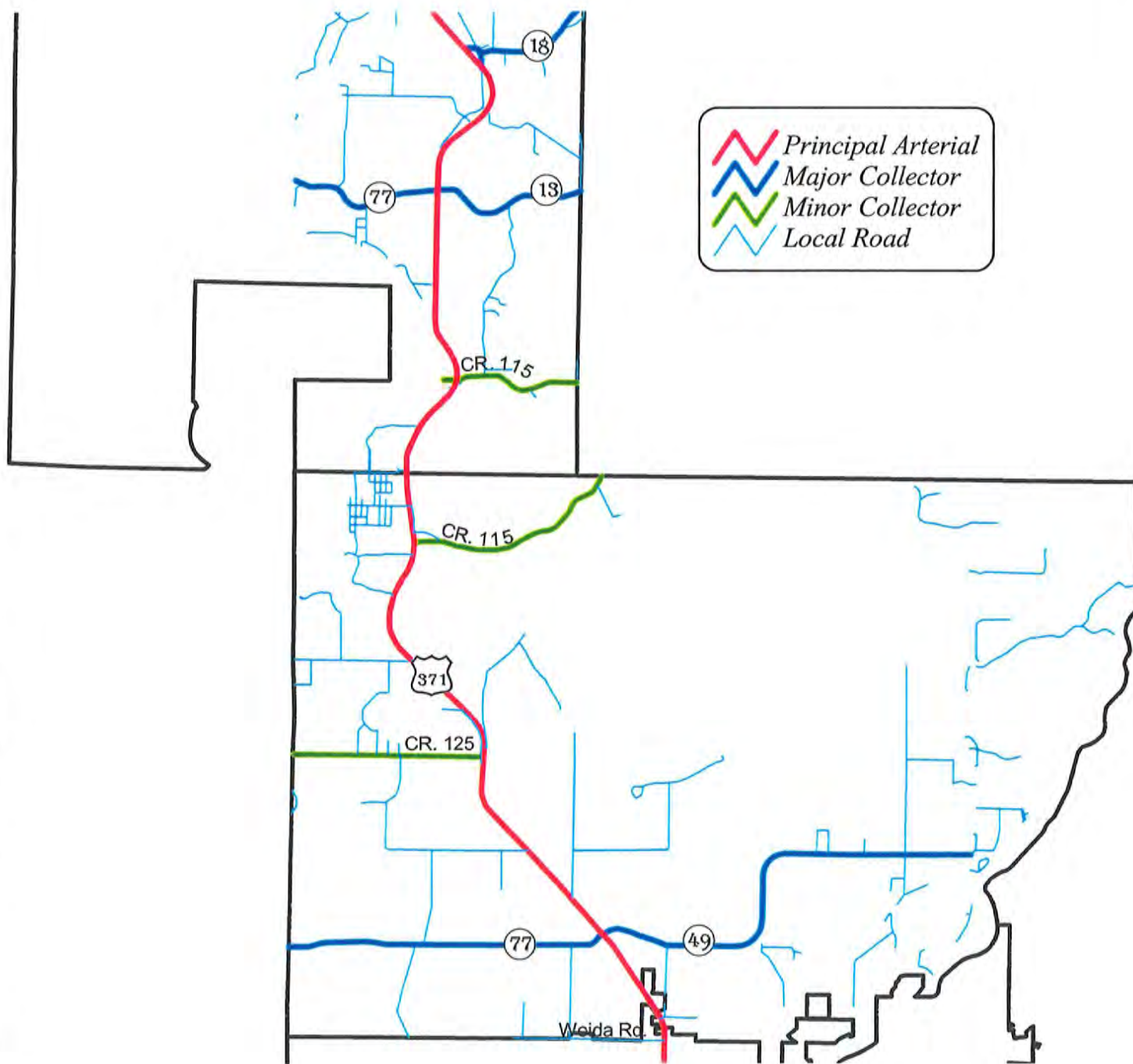
Other roads, which intersect with TH 371, have the following classifications:

Wolda Road -----	Unclassified
CSAH 77 (Pine Beach Road) -----	Major Collector
CSAH 49 -----	Major Collector
CR 125 (Gull Dam Road) -----	Minor Collector
CR 115 -----	Minor Collector
CSAH 77 (in Nisswa) -----	Major Collector
CSAH 13 -----	Major Collector
CSAH 18 -----	Major Collector

The purpose of identifying the functional classification of intersecting roadways is that the higher the classification the greater the access. Therefore, full intersections should be located at roadways with higher functional classifications.



**Figure 12**  
**Functional Classification**



### **2.5.2 Local Plans**

The Cities of Baxter and Nisswa, Unorganized Territory, and Crow Wing County have identified access management and the development of service roads as a priority within their local plans. They have provided support throughout the development of the TH 371 Access Management Plan. Examples of policies that support access management include:

- “Promote policies and projects that encourage local traffic to stay off high speed roads. Solutions shall include neighborhood and area traffic planning with each development proposal, along with use, when possible, of frontage roads and backage roads.” (City of Baxter Comprehensive Plan, 1996)
- The city should encourage the use of backage roads and double front building design.” (City of Nisswa Comprehensive Plan, 1999)
- “An overall plan for expansion of frontage roads on TH 371 is needed.” (Unorganized Territory Comprehensive Plan, 1997)
- “Promote policies and projects that encourage local traffic to stay off high speed roads. Solutions should include better planning and development, along with greater use of frontage and backage roads.” (Crow Wing County Comprehensive Plan, 1994)

There are also planned improvements within the corridor by Crow Wing County. CSAH 77N is scheduled to be rehabilitated and resurfaced this year. The county will reconstruct CR 125 in FY 2002. This project will need to be coordinated with the TH 371 Access Management Plan. Crow Wing County also has plans for a rehabilitation project on CSAH 77 in Nisswa in FY 2001, which will include shoulder widening. In addition, the City of Nisswa has recommended a realignment of CSAH 18 in Nisswa in the future, which is supported by Crow Wing County.

### **3.0 Access Management Guidelines**

Access management guidelines can be used to balance the need for access to property and mobility of a roadway. The basis for access management guidelines is that different roads serve different purposes. Mn/DOT is in the process of developing access management guidelines for all roadways. Each roadway has been classified according to the: (1) functional classification/IRC system; (2) character of surrounding development; and (3) roadway design. Surrounding development is classified as Rural/Exurban/Bypass, Urban/Urbanizing or Urban Core. Rural/Exurban/Bypass should be used for roadways that are adjacent to agricultural, forested or low density residential. Urban/Urbanizing should be used for roadways that are adjacent to areas outside of urban cores, which are developed or will be developed in the future with urban services. Urban Core should be used for roadways within fully developed town centers. The access management guidelines identify

intersection spacing, signalization, and private access standards. The guidelines should be used to address the following activities:

- Reconstruction or construction of roads.
- Access to new development.
- Redevelopment of fully developed corridors.
- Regulation of entrance permits.

Table 9 shows an excerpt from the Draft Access Management Guidelines. TH 371 is classified as a Category 2A. The guidelines recommend signal spacing of one mile. According to the draft guidelines, "These roadways are intended to provide high speed, uninterrupted travel between and among major metropolitan and urban centers of the state. As such the mobility function of these roadways is strongly emphasized and land access should be provided only through a supporting road network of major arterials."

**Table 9**  
**Access Management Guidelines**  
**Medium Priority IRCs**

Category	Area Type	Typical Functional Class	Facility Type	Intersection Spacing		Signal Spacing	Private Access
				Full Median Opening	Right-In/Right-Out		
2A-F	All	Principal Arterials	Full Grade Separation	Interchange Access Only		Not Allowed	Not Allowed
2A	Rural ExUrban Bypass	Principal Arterials	Divided	1 Mile	Variance Only	Strongly Discouraged	By Variance Only
			Undivided	1 Mile Other by Condition	Not Applicable	By Variance	
2B	Urban Urbanizing	Principal Arterials	Divided	1 Mile	1/2 Mile	Strongly Discouraged	By Variance Only
			Undivided	1 Mile Other by Condition	Not Applicable	By Variance	
2C	Urban Core	Principal Arterials	All	300-660 Feet Dependent upon Block Length		1/4 Mile	By Exception or Variance Only

## **4.0 Corridor Issues and Recommendations**

As part of the development of the TH 371 Access Management Plan, a number of meetings were held with property owners. The meetings were held in Baxter, Unorganized Territory, and Nisswa. The purpose of these meetings was to present information on the study, as well as obtain input. Information on the study's objectives, technical data, and access management concepts was presented at the meetings. A summary of each meeting is included in Appendix A.

In addition, the TH 371 Access Management Committee identified issues along the corridor. The committee made recommendations for access management improvements between Wolda Road in Baxter and CSAH 18 in Nisswa that was based on all the information gathered throughout the year-long study. The following pages provide a summary of the issues and recommendations for access management improvements on TH 371 in Baxter, Unorganized Territory, and Nisswa.

The TH 371 access management concept is based on construction of service roads, consolidation of access points, elimination of median crossovers, and intersection improvements. A description of each access management tool is shown below.

- **Service Roads**

Service roads include both frontage and backage roads. The purpose of a service road is to separate local traffic from through traffic and funnel this traffic to major intersections.

- **Consolidation of Access Points**

Consolidation of access points reduces the number of potential conflict points along a highway. Once service roads are established, access points are eliminated. Another implementation strategy is to encourage joint driveways.

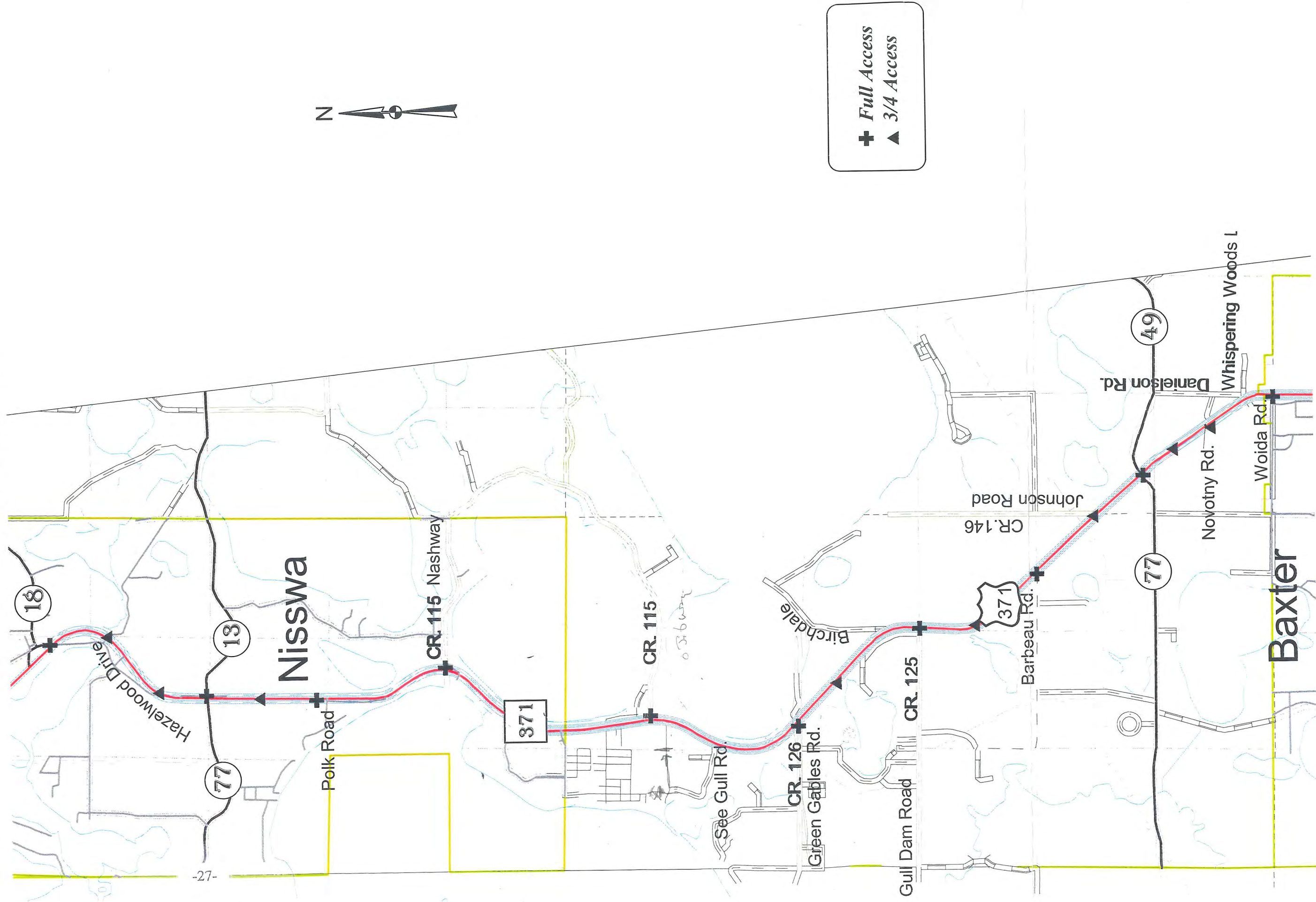
- **Elimination of Median Crossovers**

A center median reduces the number of conflicts from 36 to four at an intersection of a four-lane road and a two-lane road. The closing of the median crossover eliminates crossing traffic, which is the most dangerous.

- **Intersection Improvements**

For the purpose of this plan, intersection improvements include realignments and establishment of new intersections with turning lanes.

**Figure 13**  
**TH 371 Access Management Plan**  
**Major Access Points**



The overall concept philosophy is to establish major access points at intervals of approximately one mile. Major intersections include county and city roadways that are functionally classified as collectors or higher on the system. In addition to the major intersections, 3/4 intersections are located at intermediate points. A 3/4-intersection allows left-in, right-in and right-out movements. The purpose of this type of intermediate access is to serve existing businesses, and compensate for the discontinuity of service roads due to the topography of the surrounding area. Major access points are shown in Figure 13.

A summary of the concepts is provided on the following pages.

## Corridor Recommendations by Segment

### Segment 1:

*Woida Road to CSAH 77/49 (Pine Beach Road) (R.P. 33.707 to R.P. 35.040)*

#### Concept:

- Backage road on east side connecting to existing frontage road.
- Backage road on west side connecting to existing frontage road.
- One 3/4 access point at Novotny Road.
- One 3/4 access point south of Rolling Thunder Go-Cart Track.
- One 3/4 access point south of Paul Bunyan Nature Learning Center.

#### Access Spacing:

- Woida Road to 3/4 access point (at Novotny Road) . . . . . 1/2 mi.
- 3/4 access point (at Novotny Road) to 3/4 access point  
(s. of go-cart track) . . . . . 1/3 mi.
- 3/4 access point (s. of go-cart track) to 3/4 access point  
(s. of Paul Bunyan Nature Learning Center) . . . . . 1/10 mi.
- 3/4 access point (s. of Paul Bunyan Nature Learning Center  
to CSAH 77/49 . . . . . 1/3 mi.

#### Issues:

- Signal at Novotny Road.
- Wetland impacts north of Johnson Storage.
- Close proximity of existing service roads to TH 371/Woida Road intersection.

#### Recommendations:

- Three 3/4-intersections between Woida Road and CSAH 77/49.
- Two staggered 3/4 access points at the northern end of the segment.
- West side frontage road and west side backage road.
- Baxter to implement project(s) under Cooperative Agreement Program.

#### Priority:

- Short-term

PRIORITY KEY		
Short-Term	Mid-Term	Long-Term
Less than five years	Five - 10 years	10+ years

# OPTION 10

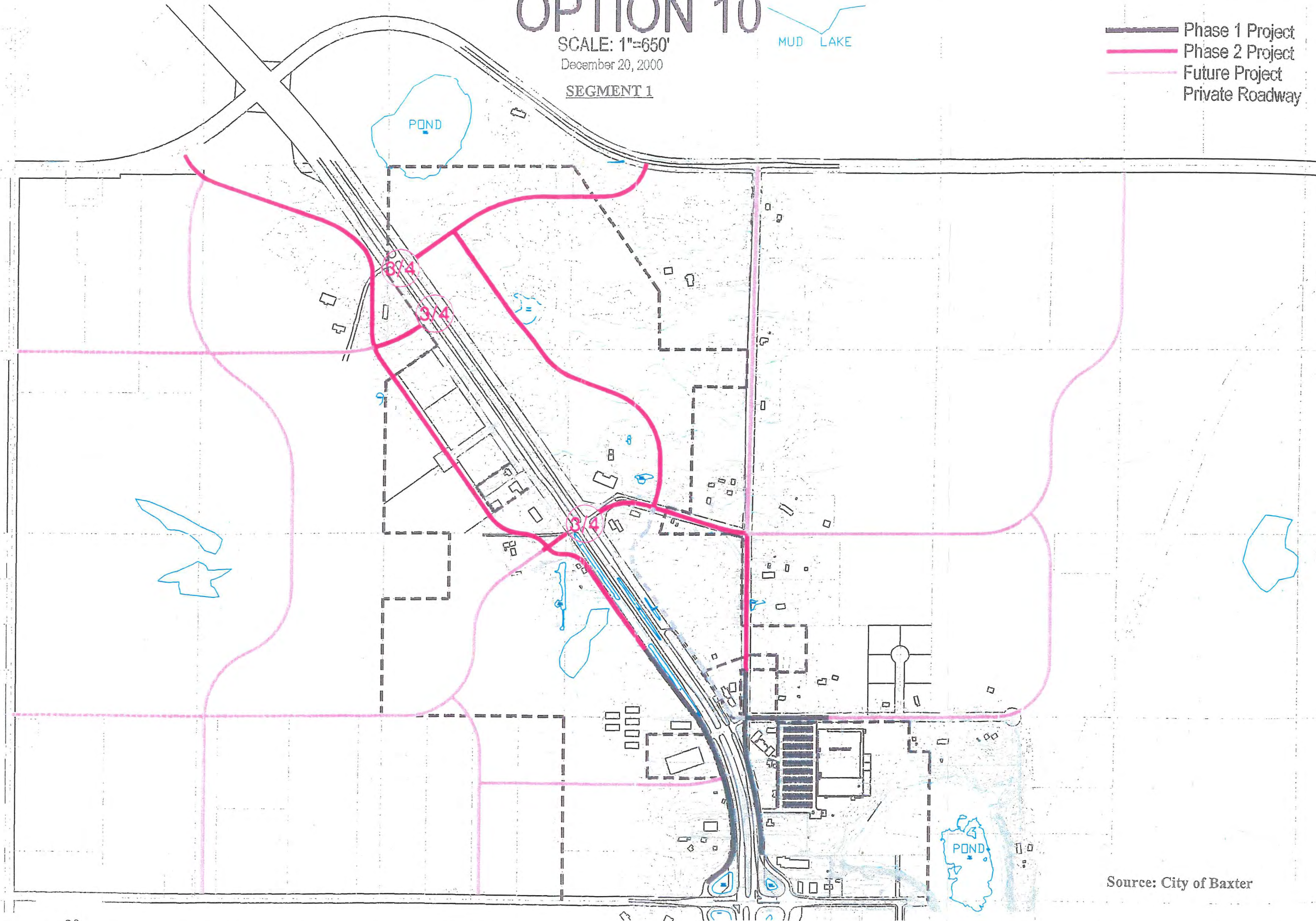
SCALE: 1"=650'

December 20, 2000

SEGMENT 1

MUD LAKE

- Phase 1 Project
- Phase 2 Project
- Future Project
- Private Roadway



Source: City of Baxter

Segment 2:

*CSAH 77/49 (Pine Beach Road) to CR 125 (Gull Dam Road) (R.P. 35.040 to R.P. 37.444)*

Concept:

- Frontage road between CSAH 77/49 and Barbeau Road.
- Frontage or backage road from Barbeau Road north to CR 125.
- One 3/4 access point north of Johnson Road and one 3/4 access point north of Crow Wing Power.
- One full access point north of existing Barbeau Road that would be realigned.

Access Spacing:

- CSAH 77/49 to 3/4 access point (north of Johnson Road) ..... 3/4 mi.
- 3/4 access point (north of Johnson Rd) to full access (north of Barbeau Rd) . 1/2 mi.
- Full access (north of Barbeau Rd) to 3/4 access point (north of Crow Wing Power) ..... 1/2 mi.
- 3/4 access point (north of Crow Wing Power) to CR 125 ..... 1/2 mi.

Issues:

- Backage road north of Johnson Road.
- Backage road versus frontage road north of Barbeau Road.
- Wetland impacts north of Acorn Nursery.

Recommendations:

- Two 3/4-intersections and one intermediate full access.
- Frontage road (if R/W is donated, backage road could be considered behind Crow Wing Power).

Priorities:

- Mid-term: CSAH 77/49 to Johnson Road and build Barbeau Road bubble
- Long-term: Barbeau Road to CR 125 (local government to provide R/W if backage road is built)

SEGMENT 2

Preliminary subject  
to change

SCALE 1" = 100'

LEGEND

- Edge of rd
- Proposed C/L
- Existing R/W
- Proposed R/W

T.H. 371

C.S.A.H. No. 49

970303200000009  
8.57 ACRES  
NOT INCLUDING POND

970303200000009  
2.51 ACRES

970303200000009  
30.41 ACRES

970303200000009  
3.86 ACRES

970303200000009  
1.74 ACRES

970303200000009  
1.74 ACRES

970303200000009  
12.85 ACRES  
INCLUDING POND

970303200000009  
1.74 ACRES

970303200000009  
1.74 ACRES



SEGMENT 2

Preliminary subject to change

T.H. No. 371

T.H. No. 371

98025200800009  
19.22 ACRES TOTAL  
INCLUDING WETLANDS

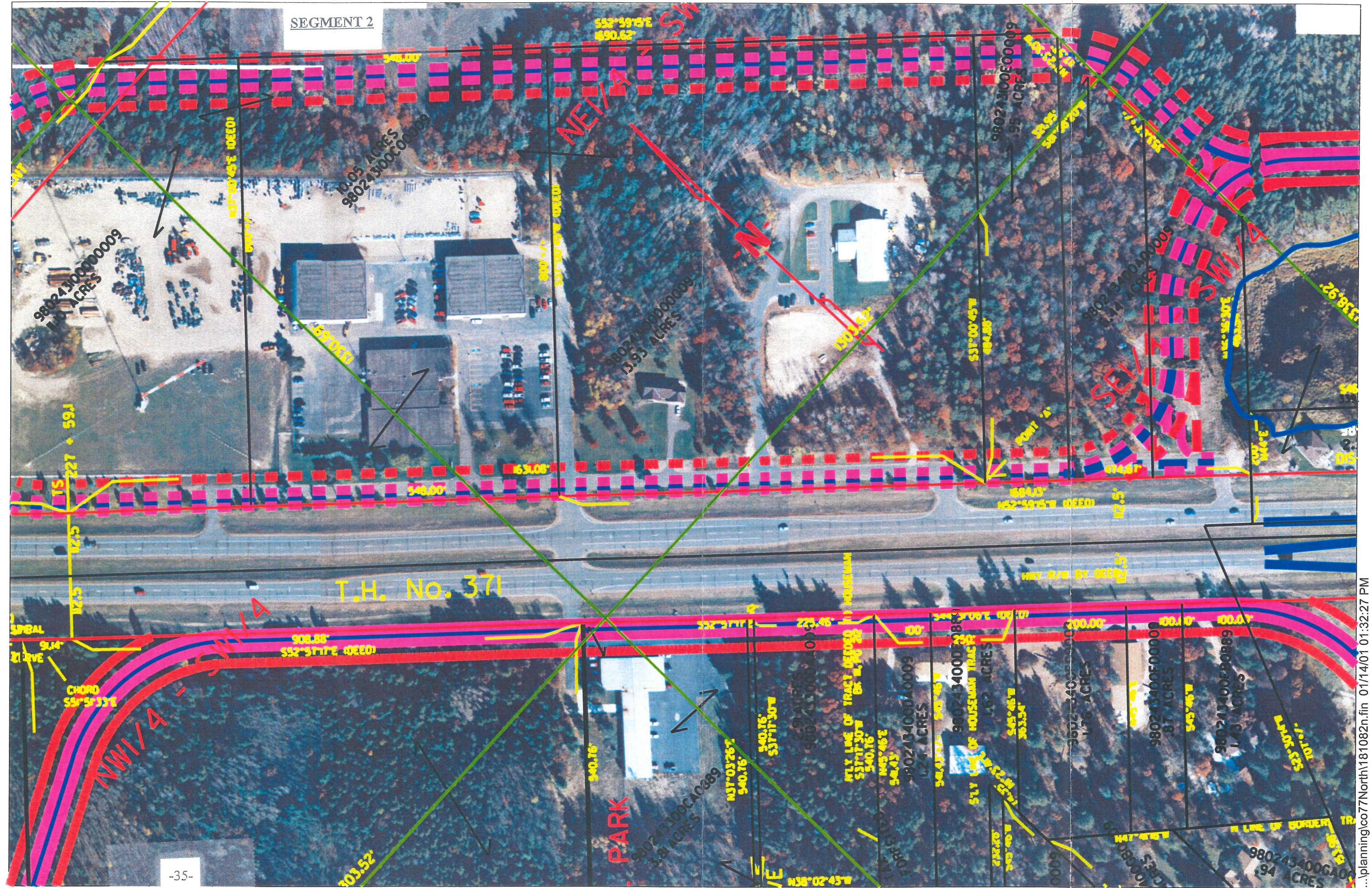
42+/- ACRES

98024300800009  
19.45 ACRES

98025200400009  
12.73 ACRES

98025130000000  
10.54 ACRES

SEGMENT 2



-36-

Segment 3:

*CR 125 (Gull Dam Road) to St. Columbo Road (R.P. 37.444 to R.P. 40.918)*

Concept:

- Frontage road between CR 125 (Gull Dam Road) and CR 126 (Green Gables Road) R.P. 38.782, except in areas where it is undeveloped. This includes the old drive-in property and property north of the Old Waterfall.
- Possible closure of median crossovers between CR 126 (Green Gables Road) and St. Columbo Road.
- 3/4 access point north of old drive-in access.
- Full access point at CR 125 (Gull Dam Road) and CR 126 (Green Gables Road).

Access Spacing:

- CR 125 to 3/4 access point (north of old drive-in access) ..... 3/4 mi.
- 3/4 access point to CR 126 ..... 1/2 mi.

Issues:

- Impact on businesses at CR 125 intersection.
- BIR entrance.
- Proposed plat north of Old Waterfall.
- Close proximity of businesses on west side of TH 371 between CR 125 and old drive-in property.

Recommendations:

- One 3/4-intersection north of old drive-in access.
- Full access at CR 125 (Gull Dam Road) and CR 126 (Green Gables Road).
- Frontage in developed area and backage road in undeveloped area.

Priorities:

- Mid-term: CR 125 to north of Old Waterfall (east side)
- Long-term or with development: CR 125 to CR 126 (west side) and north of Old Waterfall (east side). Roads should be platted as part of the development of the old drive-in property and area north of the Old Waterfall.

SEGMENT 3

SE 1/4 - SE 1/4

GULL DAM PROJECT  
Co. Rd. No. 125

98023100800889  
13.60 ACRES

Preliminary subject  
to change

NE 1/4 - NE 1/4

GOV'T LOT

391 P

T-4

Preliminary subject  
to change

SW1/A



Edge of rd

Proposed C/L

Existing R/W

Proposed R/W

GOV-T LOT

SEGMENT 3

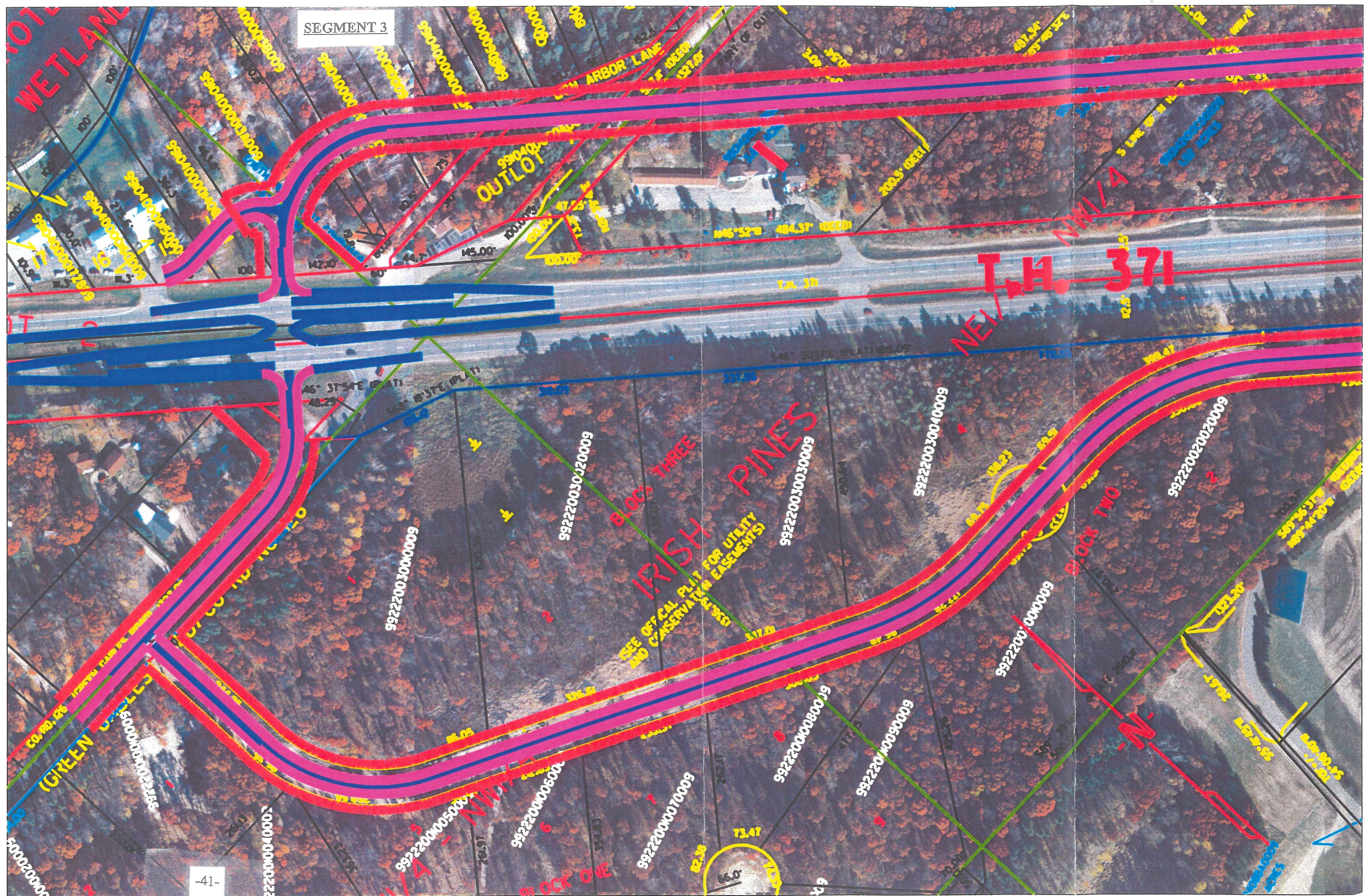
POND

WETLAND

GOV'T

GOV'T LOT

ROAD EASEMENT



#### Segment 4:

##### *St. Columbo Road to CSAH 18 in Nisswa (R.P. 40.918 to 45.717)*

#### Concept:

- Frontage/backage road on west side between Hole-in-the-Day Drive and CSAH 77/13.
- Frontage road on east side connecting to existing service roads north and south of CSAH 13.
- Backage road on west side connecting between CSAH 77 and Hazelwood Drive.
- Hazelwood Drive would not be widened in the short-term.
- Full access point north of Polk Road.
- 3/4 access point at flea market.
- 3/4 access point north of Hazelwood Drive.
- Full or 3/4 access point at future CSAH 18 intersection.
- Full or 3/4 access point at existing CSAH 18 intersection.

#### Access Spacing:

- North of Polk Road to 3/4 access point ..... 1/3 mi.
- 3/4 access point to CSAH 77/13 ..... 2/3 mi.
- CSAH 77/13 to access point (n. of Hazelwood Drive) ..... 3/4 mi.
- 3/4 access point (n. of Hazelwood Drive) to Future  
CSAH 18 intersection (3/4 or full) ..... 1/2 mi.
- New CSAH 18 to Existing CSAH 18 ..... 3/4 mi.

#### Issues:

- Impact of service roads on east side of highway near Marv Koep's Bait Shop.
- Wetlands
- Increased traffic on Hazelwood Drive.

#### Recommendations:

- Full access north of Polk Road and at CSAH 18.
- One 3/4-intersection at flea market entrance.
- 3/4-intersection north of Hazelwood Drive.
- Frontage/backage road on west side and frontage road on east side.

#### Priorities:

- Short-term or with development: CSAH 77 south to Polk Road (west side)  
CSAH 77 to backage road connection (cooperative agreement)
- Mid-term: CSAH 13 south to 3/4 intersection (east side)  
CSAH 13 north to connection with existing frontage road (east side)  
CSAH 77 to Hazelwood Drive (west side)
- Long-term or with development: 3/4 intersection south of CSAH 13 to full access  
intersection (east side)  
End of frontage road to CSAH 18 (east side)

SEGMENT 4

SCALE 1" = 100'



Preliminary subject to change

**LEGEND**

Edge of rd	
Proposed C/L	
Existing R/W	
Proposed R/W	

SE 1/4 - 371

I.H. No. 371

POLK ROAD

HOLE-IN-THE-DAY-ON-CULL  
CUTLOLL

U.S. Hi. 371

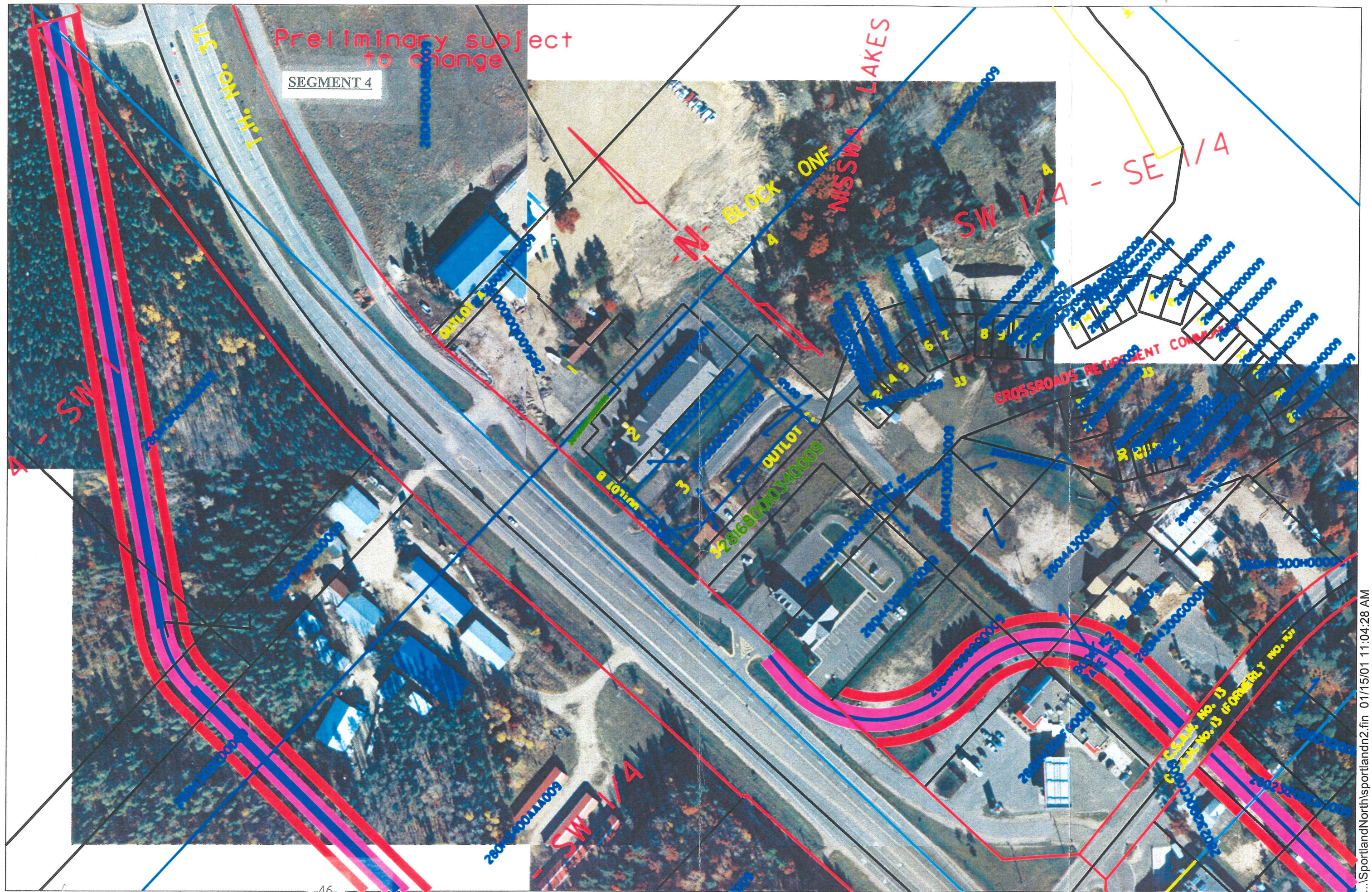


Preliminary subject  
to change

C.S.A.H. No 77

Preliminary subject  
to change

SEGMENT 4



[illegible][illegible]



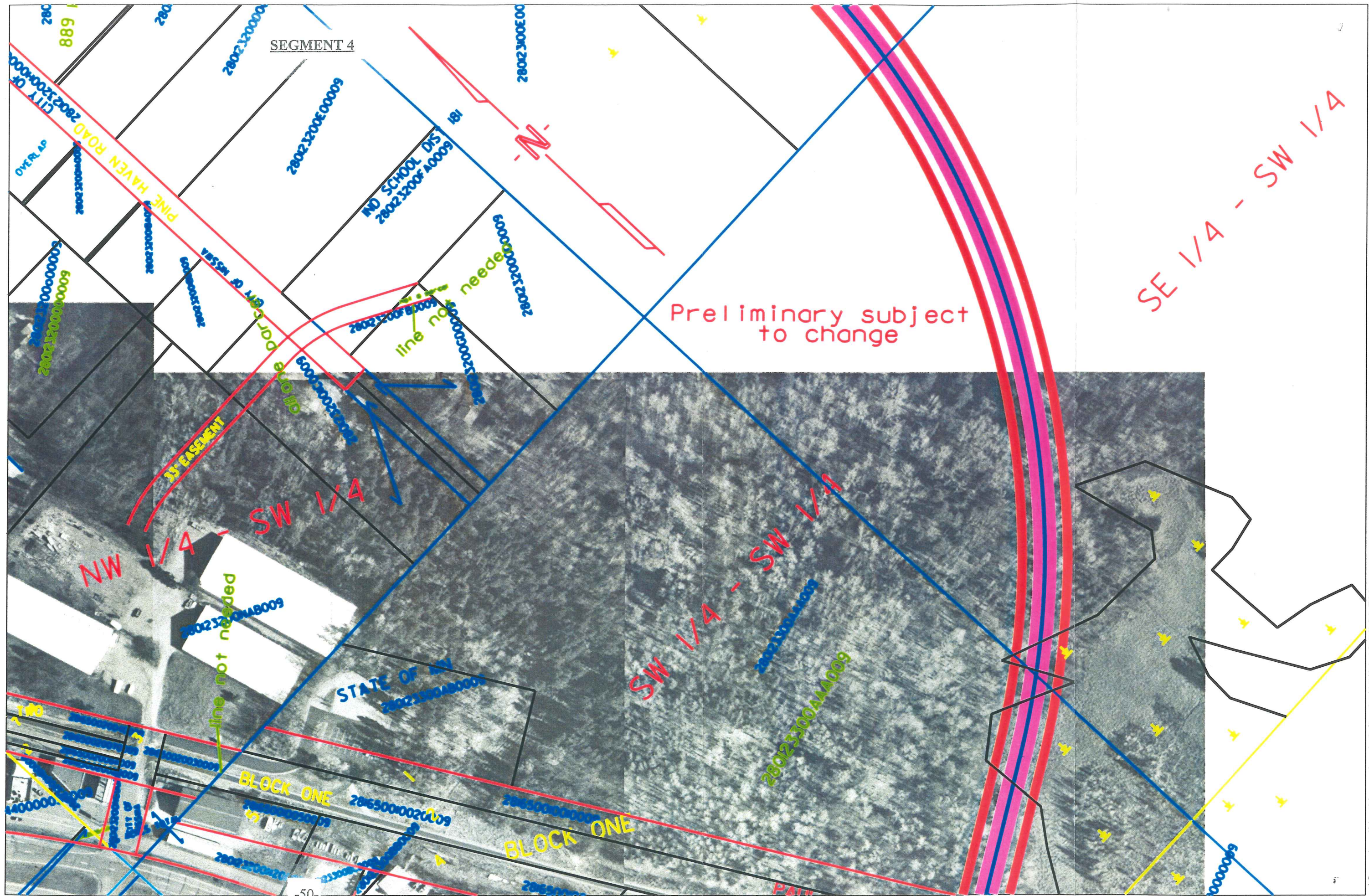
## SEGMENT 4

PAUL BUNYAN TRAIL  
NISSWA ADDITION

not in right

Preliminary subject  
to change

**LAZY BROOK  
TOWNHOMES**  
REPEAT OF 1997



SEGMENT 4

OVERLAP

PINE HAVEN ROAD

IND SCHOOL DIST  
28023200F A0009

Preliminary subject  
to change

SE 1/4 - SW 1/4

EASEMENT

NW 1/4

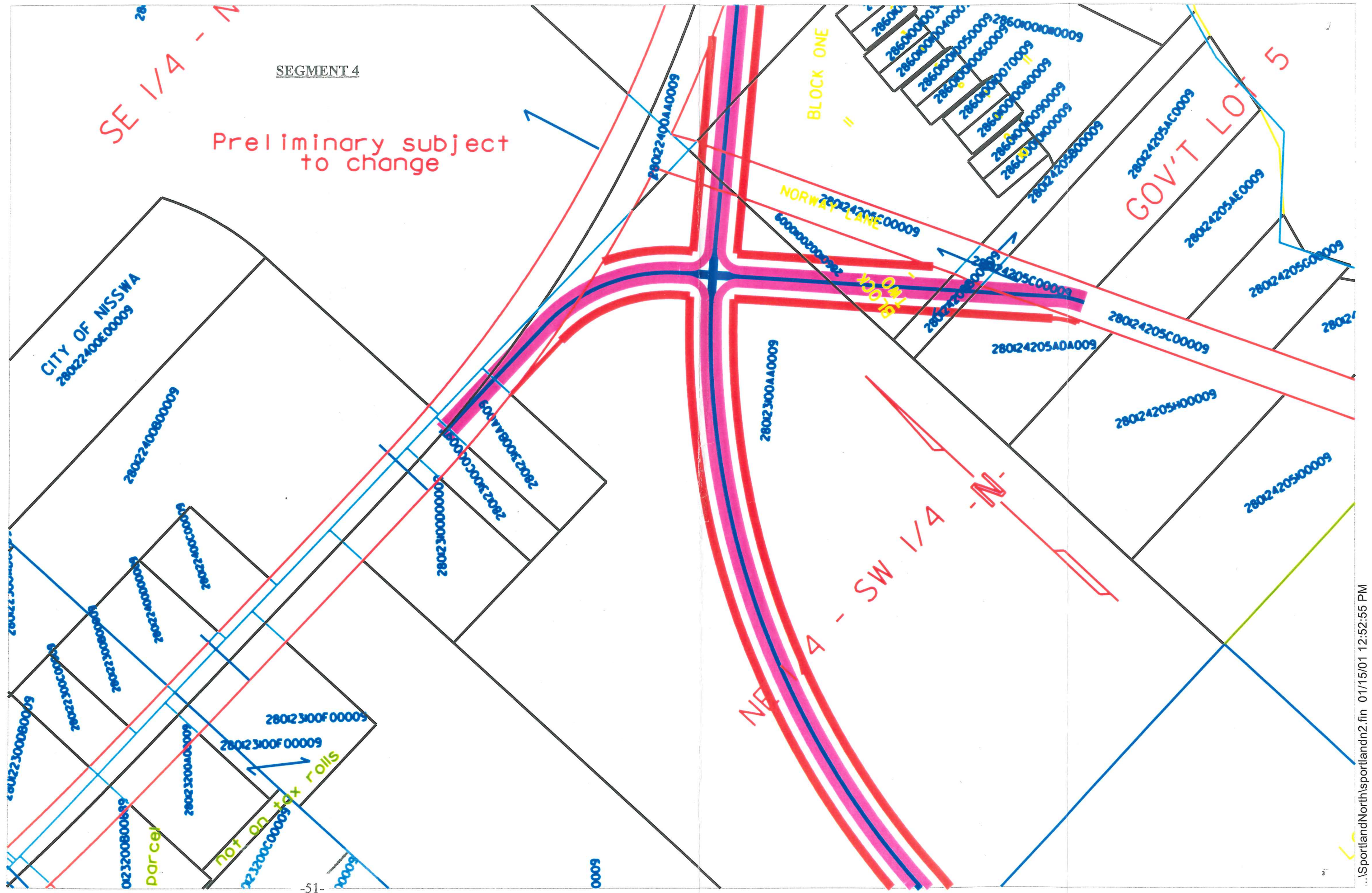
SW 1/4

STATE OF WA  
28023200A0000

BLOCK ONE

BLOCK ONE

SW 1/4 - SW 1/4



## 5.0 Implementation

The TH 371 corridor is important to the communities within the corridor, northern Minnesota, as well as the State of Minnesota. The need for cooperation between Mn/DOT, Crow Wing County, Baxter, Nisswa, and Unorganized Territory is important as implementation moves forward. The first step of implementation is the adoption of the TH 371 Access Management Plan by Crow Wing County, the cities of Baxter and Nisswa, and Unorganized Territory.

Projects have been identified with short-term, mid-term, and long-term priorities. Short-term is defined with an implementation timeline of less than five years, mid-term as five to 10 years, and long-term as over 10 years. Mn/DOT is recommending that mid-term projects be completed by District 3. Construction of these projects will be based on available funding. Once projects are programmed, District 3 will work with local units of government as it proceeds through the design and construction phases of implementation.

Another important implementation tool will be local zoning regulations. The following provisions should be adopted by Baxter, Nisswa, and Unorganized Territory (Crow Wing County).

1. Access shall be consistent with the TH 371 Access Management Plan.
2. Private direct access onto TH 371 shall be prohibited where alternative local access is available. For existing lots of record, where alternative access is not available, temporary direct access may be permitted. A temporary access connection restriction agreement, which stipulates the terms of removal, shall be required to be recorded on the property.
3. No new private direct access shall be granted as a result of a change in use.
4. Existing accesses shall be consolidated when feasible. This may require cross access and shared access easements.
5. Driveways shall be located outside of the functional area of intersections and turning lanes.

The use of zoning regulations will be important - especially for areas identified as a long-term priority.

The TH 371 Access Management Plan is to be used as a guide by Mn/DOT and local units of government in making access-related decisions that will improve the transportation system of the area. The overall goal of the plan is to link transportation/access decisions with land use decisions within the TH 371 corridor.

## **APPENDIX A**

### **TH 371 Access Management Committee**

## TH 371 Access Management Committee

<u>NAME</u>	<u>REPRESENTING</u>
Don Anderson	City of Nisswa
Duane Blanck	Crow Wing Co./Unorganized Territory
Harold Kraus	City of Nisswa
Larry Kruse	City of Baxter
Ed Larsen	Crow Wing Co./Unorganized Territory
Wayne Van Vliet	City of Nisswa
Trevor Walter	City of Baxter
Jim Wills	Brainerd Lakes Area Chamber of Commerce

## **APPENDIX B**

### **Property Owners' Meetings**

**TH 371 ACCESS MANAGEMENT STUDY**  
**September 14, 2000 Property Owners' Meeting**  
**St. Columbo Road to CSAH 18 in Nisswa**  
**Nisswa Community Center**  
**Nisswa, Minnesota**

A meeting was held on September 14, 2000, from 7:00 p.m. to 8:30 p.m. for property owners from St. Columbo Road to CSAH 18. There were approximately 25 people in attendance. Representing Mn/DOT were Terry Humbert and Mary Safgren.

Mary presented information on a service road concept between Polk Road and CSAH 18. She noted that the service road proposal shows a connection into Hole-in-the Day Drive on the west side of the highway. She stated that the proposal also includes a full intersection north of Polk Road and a 3/4 intersection 1/3 mile further north. She indicated that Sportland Corners (TH 371/CSAH 77/13) will remain a full signalized intersection. It was noted that the City of Nisswa supports a backage road concept for the old airport property. She added that north of Sportland Corners, a backage road is proposed to connect into existing Hazelwood Drive. She noted that the current intersection of the service roads with CSAH 13 should be moved further back to allow for easier access to CSAH 13 from the service drives. She stated that the existing service road on the east side should continue north to CSAH 18. Between Sportland Corners and CSAH 18 there are two 3/4 intersections. At such time when the new alignment of CSAH 18 is constructed, the existing full intersection and signal could be moved to the location of the new TH 371/CSAH 18 intersection.

The following is a list of issues raised at the meeting:

- \* impact of service roads on the east side of the highway near Marv Koep's Bait Shop,
- \* too many median crossovers,
- \* traffic exceeding the speed limit,
- \* two-lane north of Nisswa needs to be expanded,
- \* increase in traffic on Hazelwood Drive once it is connected to CSAH 77,
- \* loss of direct access to TH 371,
- \* loss of trees and wetlands, and
- \* impact on people that live here.

The following are questions and answers from the meeting:

Q: Would Mn/DOT purchase property for a road?

A: It could be done in three ways: 1) the road could be platted and developed by a developer, 2) cooperative agreement project where the City would acquire the R/W and Mn/DOT would pay for the construction of the road, and 3) condemnation.

Q: What is the proposed width of the service road?

A: We would need to work with the City of Nisswa, but commonly we plan for 66 feet of R/W. In some cases local units of government require 80 feet of R/W.

Q: Why can't Mn/DOT just lower the speed limit?

A: People travel the speed that is provided by the design of the road and it takes strict enforcement to bring speeds down.

Q: How bad is the stacking of cars on CSAH 77?

A: We will have Mn/DOT Traffic review this area for queuing.

Q: What is the timeline for this project?

A: We have planned a resurfacing project for this fall, which will be followed up in 5-6 years with a more extensive project. Under a future project, median crossovers could be removed. The construction of the service roads will be driven by development.

Q: Can you extend some of the right turn lanes on TH 371?

A: We can do this if we have enough R/W.

Q: What would the area inside the bubbles be used for?

A: It could be used for ponding or development.

Received the following comment card from David Uhrich, representing Christ Community Church.

I like the plan as far as it concerns Gull Lake Drive and Hazelwood Drive. In both cases you are proposing routing the frontage roads along present and existing roads which is the least disruptive, both for existing properties and for trees along the highway. I support the backage road ideas in those two locations.

The meeting was adjourned at 8:30 p.m.

**TH 371 Access Management Study  
September 18, 2000 Property Owners' Meeting  
CR 125 (Gull Dam Road) to CR 126 (Green Gables Road)  
Valley North Pool & Spa  
Brainerd, Minnesota**

Mn/DOT hosted a meeting of property owners along TH 371 between CR 125 and CR 126 on September 18, 2000. There were approximately 20 people in attendance representing both businesses and residences. Mn/DOT staff attending the meeting were Terry Humbert and Mary Safgren.

Mary presented information on the service road concept between CR 125 and CR 126. She explained that the intersection of CR 125 and TH 371 would remain a full intersection. She noted that a 3/4 intersection is proposed at the location of the old drive-in on the west side of the highway and north of the Old Waterfall on the east side of the highway. She added that a full intersection is shown at the intersection of TH 371 and CR 126. Mary stated that Mn/DOT is currently not proposing additional service roads north of Green Gables Road. Residents in these areas have indicated that they do not want service roads in the areas of residential development.

The following is a list of issues raised at the meeting:

- impact on businesses located at the intersection of TH 371 and CR 125, such as Mario's Sports Bar and Darrell's Auto Body
- impact on residential areas
- close proximity of some businesses to future service road

The following are questions and answers from the meeting.

Q: Can you explain the process of creating an official map of the proposed service roads?

A: Once agreement is reached regarding the location of the service roads, it would be recorded with Crow Wing County. Upon development or the sale of property needed for a future road, Mn/DOT and/or the local unit of government would need to acquire the R/W or relinquish the official map.

Q: When was this concept completed?

A: It was completed within the last month.

Q: How much local traffic is projected to be diverted off of TH 371 and onto the service road?

A: It is difficult to project the number of trips diverted off of TH 371. The primary benefit of a service road is safety. Safety is improved because access points are closed and traffic diverted to signalized intersections.

Q: What is the benefit of backage roads?

A: The local units of government in this area prefer backage roads for three reasons: 1) the ability to assess both sides of the service road, 2) the screening provided between the service road and the highway, and 3) it encourages depth to development along the highway.

Q: Would Mn/DOT "gate" the entrance to BIR?

A: Mn/DOT's preference would be to develop the service road connection from BIR to CR 125.

Q: What would the process be for developing a service road through vacant property?

A: The County could require the developer to develop the service road as part of their plat.

Q: How is right-of-way (R/W) acquired?

A: If it is a Mn/DOT project, we have an appraisal completed. In addition, we provide the property owner with financial assistance to have their own appraisal completed. Mn/DOT must offer a property owner fair market value. If a price is not agreed upon, it then goes through a condemnation process. If it is a local project, local units of government can acquire R/W through a platting process in areas being developed.

Q: Who would acquire the R/W for the realignment of Green Gables Road?

A: Mn/DOT or the County would acquire the R/W for the realignment.

Q: What is your next step?

A: We will have another meeting with property owners. Your comments will be provided to the TH 371 Access Management Committee. Our goal is to complete the TH 371 Access Management Plan by early next year. Part of the plan will include setting priorities for future projects. Short term projects could be completed within five years. Long term projects may not be completed for 20 years or longer.

The following written comments were received at the meeting:

- Put the map up going north to south, not south to north.
- I would like to be kept informed about anything affecting the Green Gables area.
- I represent the interests of Mario's Sports Bar, The Old Waterfall, and Brainerd Technical Design, all of which have concerns about their input.

The meeting was adjourned at 8:30 p.m.

**TH 371 ACCESS MANAGEMENT STUDY**  
**November 9, 2000**  
**CR 125 (Gull Dam Road) to CR 126 (Green Gables Road)**  
**Mn/DOT District 3 Headquarters**  
**Baxter, Minnesota**

Mn/DOT held a meeting for property owners along TH 371 between CR 125 and CR 126 on Thursday, November 9, 2000. There were approximately 30 people in attendance representing businesses and residences. Mn/DOT staff attending the meeting were Terry Humbert and Mary Safgren.

Mary presented information on the service road concept between CR 125 and CR 126. She explained that the intersections at CR 125 and CR 126 would be full intersections, which could be signalized in the future if warrants were met. She noted that a 3/4 intersection is recommended at the location of the old drive-in on the west side of the highway and north of the Old Waterfall on the east side of the highway. The concept that was presented showed a frontage road on the east and west sides of TH 371 following the highway up to the old drive-in property and the vacant land north of the Old Waterfall. Mn/DOT is not currently proposing additional service roads north of CR 126. Residents in these areas have indicated that they do not want service roads in areas of residential development. There are some specific areas where service roads have been requested due to safety concerns.

The following issues were raised at the meeting:

- Impact on businesses located at TH 371/CR 125 intersection.
- Impact on businesses on the west side of the highway due to their close proximity to TH 371.
- BIR entrance.

The following are questions and answers from the meeting:

- Q: Can you explain the process of creating an official map of the proposed service roads?  
A: Once agreement is reached regarding the location of service roads, it would be recorded with Crow Wing County. Upon development or sale of the property, Mn/DOT or the local unit of government would need to acquire the R/W or relinquish the official map.
- Q: How long before a project would Mn/DOT acquire R/W?  
A: R/W acquisition usually begins two years before construction.
- Q: How is R/W acquired?  
A: If it s a Mn/DOT project, we have an appraisal completed. In addition, we provide the property owners with financial assistance to have their own appraisal completed. Mn/DOT must offer a property owner fair market value. If a price is not agreed upon, it goes through a condemnation process. If it is a local project, local units of government can acquire R/W through a platting process.

Q: Would Mn/DOT "gate" the entrance to BIR?

A: This has been discussed. Traffic control would still be needed on weekends when there are major events at BIR.

Q: Why is this segment of TH 371 a high priority?

A: TH 371 is a medium priority interregional corridor, which serves both local and thru traffic. The development in this area makes it necessary that we plan for alternative local roads to access businesses along TH 371.

Q: What is the timing for the implementation of the service road between CR 125 and CR 126?

A: Our goal is to complete the TH 371 Access Management Study by early next year. Part of the plan will include setting priorities for future projects. Short-term projects could be completed within five years. Long-term projects may not be completed for 20 years or longer.

The following written comments were received at the meeting:

- We would like a copy of the proposed service drive in front of Second Time Around, from Gull Drive Inn to North Star Drilling.
- We live two doors north of Car Col Sewer. Presently we have a very dangerous access to TH 371. Our son is disabled and has care givers coming and going seven days a week, three shifts a day. In addition, he has medic vans and delivery services several times a week. Please come and see if you can help our situation.
- Please consider access to businesses north of BIR.
- Pirate's Cove - intersection of CR 125 and TH 371 issues:
  - ✓ Existing design puts us out of business - cannibalizes 70 percent of our parking.
  - ✓ If you move CR 125 slightly to the north it would save all our parking (Darrell's Car Wash wants you to buy him out anyway).
  - ✓ Backage road is not necessary - goes nowhere due to the swamp. If it was eliminated, all our parking would be saved.
  - ✓ If you give residence to our south direct access to TH 371, they are not cut off.
  - ✓ Value of our thriving business vs. value of one residence.

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